

The New York
Academy of Medicine



By Exchange



Digitized by the Internet Archive
in 2015

<https://archive.org/details/journalofflorida28unse>

The JOURNAL of the Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 1

Jacksonville, Florida, July, 1941-42

Yearly Subscription, \$3.00
Single Copy, 30c

CONTENTS

THE N.Y. ACADEMY
OF MEDICINE

JUL 29 1941

Banting: Benefactor of Mankind Seale Harris, M. D., Birmingham, Ala.	15
Fallacious Views Concerning Rhinologic Surgery and Factors Influencing More Successful Results A. R. Hollender, M. D., Miami Beach	27
Occlusive Lesions of the Peripheral Blood Vessels R. B. Harkness, M. D., Lake City	29
The Use of Solution of Posterior Pituitary Extract in Normal Labor..... Claude B. Wright, M. D., St. Petersburg	33
Editorial: Florida Legislature.....	36
Coercion of Hospital Workers Condemned	39
Judge Proctor Imposes Sentence.	39
A. M. A. Meeting.	40
Births, Marriages and Deaths.....	40
State News Items	40
Component County Societies	44
Books Received	44
Advertisers' Notes	44
Abstract Department	46
Woman's Auxiliary	48
Component Societies by Districts	51

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942
Southern Medical Association, St. Louis, November 10-13, 1941

CHART. BUREAU



Petrolagar*.. *Helps* *Start the Day Right*



• When "Habit Time" is neglected and the patient tends to become constipated, consider the use of Petrolagar as an aid to regular comfortable bowel movement. One to two tablespoonfuls daily (see directions on package) provide bland fluid to help soften the feces and bring about an easily passed, well-formed stool. As soon as a regular "Habit Time" has been re-established, the daily dosage of Petrolagar may be gradually diminished until treatment is no longer required.

Have you prescribed Petrolagar recently?

SAMPLES ARE AVAILABLE TO PHYSICIANS ON REQUEST



237895 *Petrolagar—The trademark of Petrolagar Laboratories, Inc., brand emulsion of mineral oil . . . Liquid petrolatum 65 cc. emulsified with 0.4 gm. agar in a menstruum to make 100 cc.

Petrolagar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

For Comforting Relief in Asthma and Hay Fever

Racēphedrine Hydrochloride

(UPJOHN)

Racēphedrine Hydrochloride produces dilation of the bronchi after local or systemic administration. It is therefore employed in the treatment of asthma, and is useful to prevent the attacks. It is also used in the treatment of hay fever and urticaria.

On local application to mucous membranes, Racēphedrine contracts the capillaries to a moderate degree and thus diminishes hyperemia and reduces swelling. It is used in the nostrils to shrink the congested mucosa in rhinitis and sinusitis.

Solution Racēphedrine Hydrochloride consists of 1% of the drug in a modified Ringer's solution containing sodium chloride 0.85%, potassium chloride 0.03%, calcium chloride 0.025%, magnesium chloride 0.01%, and chlorobutanol 0.5% (for stabilization purposes).

Solution Racēphedrine Hydrochloride 1% is available in one ounce dropper bottles for prescriptions, in pint bottles for office use. Capsules Racēphedrine Hydrochloride, $\frac{3}{8}$ grain, are packaged in bottles of 40 and 250.



FINE PHARMACEUTICALS SINCE 1886

Upjohn

KALAMAZOO, MICHIGAN



Racēphedrine, prepared synthetically by a process which does not depend upon the plant *ma huang* for its raw material, is a racemic, optically inactive mixture of levo- and dextro-rotatory ephedrine. Thus it contains two of the four possible ephedrine stereoisomers.

FOR ANGIOSCOTOMETRY

USE THE STEREO CAMPIMETER BY AMERICAN

The study of central visual fields, including Angioscotometry, one of the most recent clinical developments, can be carried out under ideal conditions with the Lloyd Stereo Campimeter by American. The requirements of steady fixation, stereoscopically maintained; accommodative compensation, by virtue of the collimating lens, and equalized illumination of the test field, are fulfilled as in no other instrument of its type. The AO Lloyd



PATENTED

Stereo Campimeter is only one of the many outstanding ophthalmic instruments being produced by American Optical Company and Spencer Lens Company, its Scientific Instrument Division.



BY AMERICAN OPTICAL COMPANY

We carry in stock the forms required by the

FLORIDA WORKMEN'S COMPENSATION ACT

as compiled by the Florida Industrial Commission.

S. F. 1 ... Employer's First Report of Injury	F. I. C. 7A Employee's Notice to Reject
S. F. 2 ... Surgeon's Report	F. I. C. 8 Employer's Notice to Waive Exemption
S. F. 3 ... Employer's Supplementary Report of Injury	F. I. C. 9 Final Medical Report
S. F. 4 ... Agreement as to Compensation	F. I. C. 10 Employee's Notice of Injury to Employer
S. F. 5 ... Final Compensation Settlement Receipt	F. I. C. 11 Election of Employee where a Third Party is Involved
F. I. C. 6 Notification of Securing Compensation	F. I. C. 12 Notice to Convert Payment of Compensation
F. I. C. 7 Employer's Notice to Reject	

Office Furniture and Office Supplies
Engraved, Printed and
Lithographed Stationery

The H. & W. B. DREW Company
JACKSONVILLE, FLORIDA



FLORIDA SANITARIUM AND HOSPITAL

located on one of Orlando's beautiful lakes and encircled by shaded lawns and orange groves, offers a cheerful, homelike atmosphere that induces rest and relaxation for the convalescent and the nervously fatigued individual seeking a quiet place. Facilities available for check-up and diagnosis, in charge of efficient, registered technicians. The daily routine includes prescribed diet, hydrotherapy and other forms of physical therapy, exercise, and social activities for those able to engage in them, and the best of nursing care by skilled professional nurses. Member of American Hospital Association. Ethical co-operation with the profession. Physicians cordially invited to visit the institution. Write for additional information.

Drawer 3673
ORLANDO, FLORIDA

For Fall Hay Fever SQUIBB POLLEN EXTRACTS



STARTING with August and until the time of frost, the wind-borne weed pollens are the chief offenders in causing hay fever. The following Squibb Allergenic Extracts, depending on locality, are useful at this season:

Ragweed Combined	Shadscales
Cocklebur	Warmwaads
Ragweed and Cocklebur Combined	Sheep Sarrel
Russian Thistle	

These are supplied in 5-cc. vials—which, when used with the Special Diluent Package, offer an economical means of reducing the sensitivity of hay fever sufferers.

Very convenient, too, is the three-vial package of Ragweed Combined and Ragweed and Cocklebur Combined.

Squibb Allergenic Extracts are highly potent, stable and uniform in dosage. They are standardized in protein nitrogen units. This unit has been shown by Cooke and Stull¹ to be a very close measure of allergenic activity.

Special Prescription Combinations

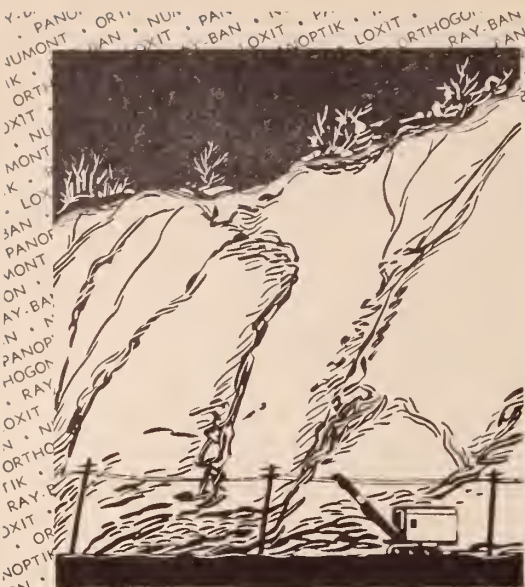
A service is available to physicians whose patients require combinations of pollen extracts not regularly supplied or in special proportion.

Physicians are invited to write concerning their problems in treating patients with hay fever. Our experience of over twenty years in making Pollen Extracts may be most helpful. Address the Medical Department, E. R. Squibb & Sons, 745 Fifth Ave., New York, N. Y.

¹ Cooke, R. A., and Stull, A.: *J. Allergy* 4: 87, 1933.

E·R·SQUIBB & SONS

Manufacturing Chemists to the Medical Profession Since 1858



Lens Quality Begins

In a Pennsylvania Hill

LENS quality begins with glass quality. And the basic ingredient of glass is sand. Oriskany quartz from the hills of southeastern Pennsylvania—many carloads of it a year—provides the Bausch & Lomb glass plant with a raw material of such purity that Bausch & Lomb is able to produce glass—and lenses—of accuracy unsurpassed on the world market. We are proud to use Bausch & Lomb lenses in our prescription work.

The SOUTHEASTERN OPTICAL CO., Inc.
distributors of **BAUSCH & LOMB** products

TAMPA

JACKSONVILLE

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED



"In the Mountains of Meridian" **HOYE'S SANITARIUM** Meridian, Miss.

Diagnosis and Treatment of
NERVOUS AND MENTAL DISEASES
ALCOHOLIC AND DRUG ADDICTIONS
Especially Equipped for the Treatment of
MENTAL DISORDERS

Convalescents, Elderly People and those Requiring
METRAZOL THERAPY Given Special Monthly
Rates. Electro-shock Therapy also Given to Eliminate Unpleasant Sensations which may Occur in Metrazol Therapy. Personal Supervision of Patients. Reasonable Rates. Consulting Physicians.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.
Fellow of the American Psychiatric Association



THE EVIDENCE to be found in numerous published reports demonstrates that Atabrine dihydrochloride materially shortens the road to recovery from malaria. In the majority of cases chemotherapy with this agent involves a remarkably brief period, generally only five days. Usually, acute paroxysms disappear within a day or two and parasites are no longer demonstrable in the blood after one short course of treatment.

The significance of such results is obvious. Not only are patients incapacitated for a very short time but the rapid eradication of parasites largely prevents anemia, splenomegaly and other chronic complications of malaria.

Write for illustrated booklet.

ATABRINE

Reg. U. S. Pat. Off. & Canada

Brand of CHINACRIN

DIHYDROCHLORIDE

Methoxychlor-diethylaminopentylamino-acridine
dihydrochloride

Chemotherapeutic Specific Against Malaria
Never Advertised to the Public



WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician • NEW YORK, N. Y. • WINDSOR, ONT.



744aM

Diaphragms for EVERY Condition



HOLLAND-RANTOS offers a most complete line of diaphragms. We invite inquiries concerning specific conditions.

• • •

The H-R Koromex diaphragm (coil spring type) is available in sizes from No. 50 to No. 105 mm., and is indicated for use in all normal anatomies.

The H-R Mensinga diaphragm (watch or flat spring) is available in sizes from No. 50 to No. 90 mm. including half sizes, and is indicated where there is a slight redundancy of the mucosa of the retro pubic space, or a slight relaxation of the anterior vaginal wall.

The H-R Matrisalus diaphragm is available in sizes—No. 1 to No. 6 corresponding to 65, 70, 75, 80, 85 and 90 mm. This special shaped diaphragm is indicated in cases of cystocele or prolapse where, owing to relaxed vaginal walls, the ordinary diaphragm cannot be retained in position.

**Send for copy of "Physician's Diaphragm Chart
and Fitting Technique"**

HOLLAND-RANTOS CO., Inc.

551 FIFTH AVENUE - - NEW YORK
308 WEST WASHINGTON ST. - CHICAGO
520 WEST 7TH STREET - LOS ANGELES

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

INDIVIDUALIZED FORMULAS FOR THE NEWBORN

NORMAL INFANTS

Whole milk 10 ozs.
Water, boiled 10 ozs.
Karo syrup 2 tbs.

Evaporated milk 6 ozs.
Water, boiled 12 ozs.
Karo syrup 2 tbs.

Powdered milk 5 tbs.
Water, boiled 20 ozs.
Karo syrup 2 tbs.

ALLERGIC INFANTS

Evaporated goat's milk... 6 ozs.
Water, boiled 12 ozs.
Karo syrup 2 tbs.

Hypoallergic milk 10 ozs.
Water, boiled 10 ozs.
Karo syrup 2 tbs.

Sobee 8 tbs.
Water, boiled 18 ozs.
Karo syrup 2 tbs.

NEUROPATHIC INFANTS

Evaporated milk 7 ozs.
Water, boiled 13 ozs.
Barley flour 3 tbs.
Karo syrup 1 tbs.
(cooked ten minutes
until thick)

Whole milk 12 ozs.
Water, boiled 6 ozs.
25% Lactic acid 2 tsp.
Karo syrup 2 tbs.

2% Lactic-acid milk ... 18 ozs.
Karo syrup 2 tbs.

*"Infants Thrive
on Karo Formulas"*



Newborns tolerate a simple formula consisting of 10 ounces of boiled fresh cow's milk, 8 ounces of sterile water and 1 ounce of mixed sugar. Added carbohydrate in the form of corn syrup is usually better tolerated than the simple sugars, lactose or sucrose. At first, about one ounce of the formula will be taken at a time although the infant is allowed all he will take of the three ounces and the remainder discarded. The allergic newborn may be given evaporated cow's-milk or goat's-milk formulas; the hypertonic newborn thick feeding; the hypotonic newborn, evaporated or lactic-acid milk formulas."

KUGELMASS: "Newer Nutrition in Pediatric Practice."

THE CHEMICAL COMPOSITION OF KARO IN GLASS AND IN TINS IS IDENTICAL

Dextrins.....	37.4%	1 oz. volume....	40 grams
Maltose.....	18%		120 cals.
Dextrose.....	12%	1 oz. wt.....	28 grams
Sucrose.....	4%		90 cals.
Invert Sugar.....	3%	1 teaspoon.....	20 cals.
Minerals.....	0.6%	1 tablespoon....	60 cals.
Moisture.....	25%		

(Karo—Blue Label)

CORN PRODUCTS SALES COMPANY

17 Battery Place, New York City

All smokers inhale— *at least some of the time*

SOME smokers inhale always — some only now and then—and when they do, isn't it true that exposure to irritation increases? Important, therefore, to smokers is this proved* Philip Morris advantage:

“ON COMPARING — THE IRRITANT QUALITY IN THE SMOKE OF THE FOUR OTHER LEADING BRANDS WAS FOUND BY RECOGNIZED LABORATORY TESTS TO AVERAGE MORE THAN THREE TIMES THAT OF THE STRIKINGLY CONTRASTED PHILIP MORRIS! FURTHER — THE IRRITANT EFFECT OF SUCH CIGARETTES WAS OBSERVED TO LAST MORE THAN FIVE TIMES AS LONG !”

PHILIP MORRIS

Philip Morris & Company, Ltd., Inc., 119 Fifth Ave., New York

*Facts from: Proc. Soc. Exp. Biol. & Med., 1934, 32, 241-245; N. Y. State Jrl. of Med. Vol. 35, No. 11,590; Arch. of Otolaryngology, Mar. 1936, Vol. 23, No. 3,306



Clinical advantages of 'Propadrine' Hydrochloride in symptomatic control of hay fever and asthma

'Propadrine' Hydrochloride (phenyl-propanol-amine hydrochloride) is a primary amine with similar pharmacological action and the same field of clinical application as ephedrine. The clinical characteristics of 'Propadrine' Hydrochloride in the symptomatic control of hay fever and asthma are manifested by:

1. The comparative absence of side-effects such as insomnia, nervousness, excitation, and emuresis.
2. Simultaneous administration of sedatives is usually obviated.
3. May be administered in therapeutic dosage over long periods of time.

'Propadrine' Hydrochloride, because of its bronchodilator action, affords relief to

many asthmatic patients in $\frac{3}{8}$ -grain doses every three hours. This may be increased to $\frac{3}{4}$ grain every three hours in adults and in children over eight years of age without untoward effect.

Solution 'Propadrine' Hydrochloride is also of value in allergic rhinitis with associated edema of the nasal mucous membrane.

How Supplied

CAPSULES: $\frac{3}{8}$ grain—bottles of 25, 100 and 500;
 $\frac{3}{4}$ grain—bottles of 25, 100 and 500.

ELIXIR: Each fluidounce contains 2 grs. 'Propadrine' Hydrochloride. In pints and gallons.

SOLUTION (Aqueous): 1% (isotonic)—1-ounce and pint bottles; 3%—1-ounce and pint bottles.

NASAL JELLY: in $\frac{1}{2}$ -ounce tubes containing 0.66% 'Propadrine' Hydrochloride.



'PROPADRINE' HYDROCHLORIDE

Sharp & Dohme

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



**THE
DRINK
EVERYBODY
KNOWS**

Drink

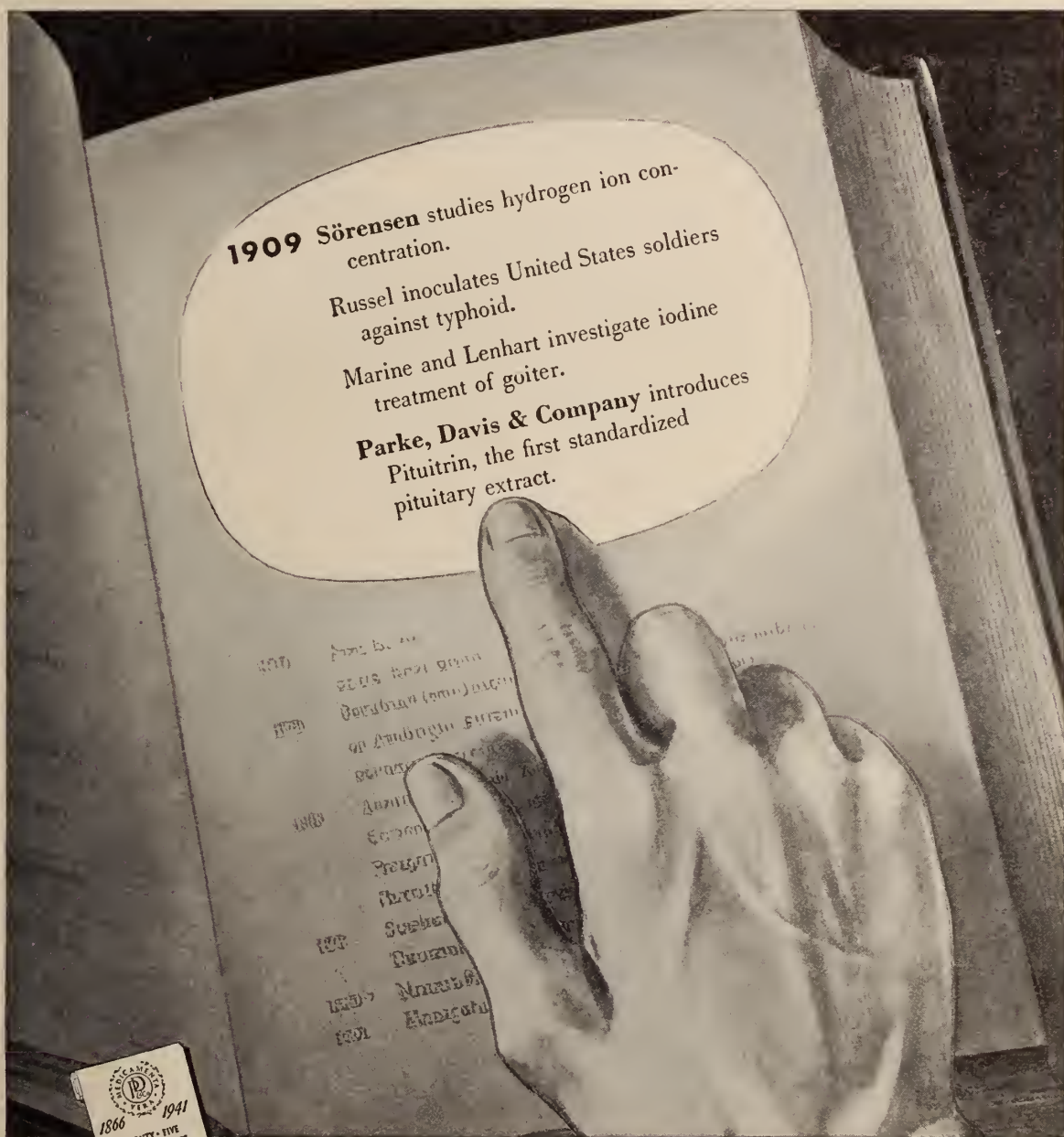
Coca-Cola

Delicious and
Refreshing

COPYRIGHT 1939, THE COCA-COLA COMPANY

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THESE NAMES, THESE YEARS . . . HAVE HELPED MAKE MODERN MEDICAL HISTORY



One of a series of advertisements commemorating three-quarters of a century of progress and achievement

Parke, Davis & Company

**PIONEERS IN RESEARCH
ON MEDICINAL PRODUCTS**

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

Step toward Perfection

Crude drugs and chemicals procured for the preparation of Lilly products must measure up to highest standards. Assays from outside sources, no matter how reliable, never are accepted without confirmation from the Lilly control laboratories.

LIVER EXTRACTS

Crude or Purified

For Intramuscular Injection



SOLUTION LIVER EXTRACT CRUDE, LILLY

2 injectable U.S.P. units per cc.

1 injectable U.S.P. unit per cc.

SOLUTION LIVER EXTRACT PURIFIED, LILLY

15 injectable U.S.P. units per cc.

10 injectable U.S.P. units per cc.

5 injectable U.S.P. units per cc.

ELI LILLY AND COMPANY

Principal Offices and Laboratories, Indianapolis, Indiana, U. S. A.

BANTING: BENEFACTOR OF MANKIND

Seale Harris, M. D.
Birmingham, Alabama

It is pleasing to realize that of the many physicians of great achievement in the United States, any one of whom would be honored by the invitation to be the guest speaker on this occasion, your President has selected me as his choice for that honor. While I know that friendship for me rather than an estimate of my attainments as a physician, was the deciding factor in my favor, nevertheless, I am profoundly grateful to him for the invitation to be his "guest speaker." I deeply appreciate the privilege of presenting for your entertainment and consideration a biographical sketch of Frederick G. Banting, one of the greatest benefactors of mankind in the history of civilization.

A FLORIDA MEDICAL HERO. Before proceeding with my remarks on the life of Sir Frederick Banting, may I not express an appreciation for the achievement of another hero in medicine, your President, whom I regard as one of the great men in American surgery. He has not the prestige of a professor of surgery in an endowed medical college, he has not written textbooks to make him regarded as an authority on surgery, he has not been made president of a national medical or surgical association, an honor which by his attainments and accomplishments he deserves, and he does not work and operate in the glamor of a great hospital with "a train attendant." He nevertheless is doing as good surgery as any professor of surgery in the United States, he has presented papers on surgery which in excellence measure up to those written by surgeons who are regarded as authorities, and as President of the Florida Medical Association he has received the highest honor in the gift of his confreres who know him best.

Dr. Turberville has not sought fame, yet I know that in mental stature and in professional attainments he is greater than many of those

who have received high honors bestowed by national medical and surgical associations. I also believe that no American physician has nobler and finer qualities of heart and mind than the simple and humble man, who operates a small hospital in a Florida sawmill village. We, in Alabama, regard Dr. Turberville as one of our own. He was born and reared in our state, and he graduated in medicine from the Medical Department of the University of Alabama, at Mobile, an institution in which I was professor of medicine for eight years. Dr. Turberville's alma mater is proud of her son, who has achieved signal success in another state.

Dr. Turberville treats and operates upon more patients from Alabama than from Florida. I have visited patients in the Turberville Hospital in Century, and I know something of the end results of the surgery that is done there. I, therefore, am prepared to give an estimate of the quality of the surgical service which Dr. Turberville and his sons are rendering. Christ, the Great Physician, went about healing the sick; and the Florida surgeon, who, without ostentation and blare of trumpets, ministers to the needs of suffering men and women who come to him without solicitation from many states, like his Master, knows "the travail of his soul" and is satisfied without being vain.

SIR FREDERICK BANTING. In this gloomy hour when a demoniac is leading a nation of megalomaniacs in murdering, robbing and starving a large proportion of the population of Europe, including countless women, children and helpless old men, let us in free America eulogize a military hero of the first magnitude, who sacrificed his life in the service of his country and the other free nations of the earth, including the United States. Let us praise a benefactor of mankind, who by reason of his discovery of insulin has brought health, happiness and long life to millions of diabetic men, women and children in all parts of the world.

The tragic ending of Sir Frederick Banting in an airplane crash on February 21, 1941, cut short the career of one of the most dramatic figures in the annals of medicine. In 1921 without previous training in research this young, obscure Canadian doctor had the vision and the courage to attempt to isolate from the pancreas the hormone, called insulin by Schafer in 1910, which Osler, a quarter of a century before its discovery, had predicted would control diabetes when it was discovered. Banting did not rest until he had accomplished that great achievement.

Since I had the privilege of intimate acquaintance with Banting and heard from his lips in private conversation the story of the discovery of insulin, and since in a magazine of large circulation controversial phases of Banting's career have been discussed, it seems appropriate to present some facts which the modest, unassuming man of science would not discuss in public during his life.

PERSONAL REMINISCENCES OF BANTING. My acquaintance with Frederick Banting began in March 1923 when I made a pilgrimage to Toronto to learn the new method of treating diabetes from those who had isolated insulin from the pancreas of animals and had used it successfully in the treatment of human diabetes. Parenthetically I would add that if a physician desires information regarding any advance in medicine, experience has taught me that he can learn best from those who, because of their clinical or laboratory studies, have contributed most to the knowledge of the subject in which he is interested.

A batch of insulin, called "isletin" by the Toronto group, had been sent me by Eli Lilly and Company two months previously to use in treating diabetics, with the understanding that we were to make blood sugar studies in all our cases and that we were not to report them without submitting our records to the Toronto investigators. The first patient to whom we, my former associate, Dr. J. P. Chapman, and I, had administered insulin was an elderly woman who also had sprue and pernicious anemia. As she had had a number of disagreeable hypoglycemic reactions, we had discontinued the use of insulin, though we believed in the method of treatment. Soon afterwards I had learned

from correspondence with my friend, Dr. Bradley Palmer, of Furman, Alabama, who was studying metabolism in Frederick M. Allen's private hospital in Morristown, New Jersey, of a diabetic who had become unconscious and had had convulsions from an overdose of insulin. I then determined on a trip to Toronto, Philadelphia and Morristown to learn what I could about the new method of treating diabetes from those who knew most about it.

I first went to Banting, who, when I came into his laboratory, was performing experiments on dogs. I introduced myself and told him that I had come to Toronto to learn what I could about his experimental work and the use of insulin in the treatment of human diabetes. He was very gracious and cordial to me, saying that he would be pleased to show me everything that he was doing in the laboratory and that the following morning he would be glad to have me accompany him, with Campbell, Fletcher and other clinicians, in making daily rounds in the diabetic wards of the Toronto General Hospital. I found out later that at that time Banting's finances were very low, but he invited me to luncheon with him in the Union Building of the University of Toronto. There he introduced me to a number of his confreres who were working with him in experimental and clinical studies with insulin.

BANTING'S EXPERIMENTAL SURGERY ON DOGS. I remained in Toronto for a week, spending much of my time during each day with Banting in his laboratory and in the diabetic wards of the Toronto General Hospital. I tried not to be obtrusive in any way, and seeing my genuine interest in what he was doing, he explained carefully every phase of the experiments he was making.

It was a pleasing sight to observe the gentleness of Banting in handling his dogs. He talked to them, calling their names, and petted them like they were children. The dogs seemed to have every confidence in him, and he was able to do things with them which would have been impossible had the animals been treated less kindly.

Banting's technic in his surgery on dogs was as good as if he were operating upon a man or woman. I recall an experiment on a very large dog which was made to extract the pancreatic juice, the external secretion, from the

pancreas. The abdominal incision was made as carefully and as accurately as I have seen great surgeons make it in abdominal operations. Banting seemed to know the anatomy of dogs perfectly and in a few minutes he exposed the animal's pancreas. He placed a cannula in the pancreatic duct and allowed all the juice to escape that would flow out. He resected the duodenum and upper part of the jejunum; after washing out the intestinal contents he scraped the mucosa and made an emulsion containing secretin, which he injected into the dog's veins. In a few minutes more pancreatic juice flowed freely from the cannula. Then he injected huge doses of pilocarpine into the veins, whereupon still more pancreatic juice poured from the pancreatic duct. Altogether he had obtained about two ounces of pancreatic juice in the experiment when the pancreas was removed. Following the experiment the dog was given a lethal dose of chloroform. The animal suffered no pain during the entire experiment.

THE DOCTOR'S DILEMMA. It was an interesting coincidence that while Banting and his associates were making experiments on animals that resulted in a discovery which literally has saved, or prolonged, the lives of millions of human beings afflicted with diabetes, Bernard Shaw's idiotic protest against vivisection in his drama called "The Doctor's Dilemma" was being played in Toronto by a company of English players. It was with considerable indignation that I sat through a play in which a literary charlatan endeavored to ridicule and misinterpret the altruistic ideals of the medical profession.

Certainly the use of animals in experimental medicine, called vivisection by ignorant intelligentsia pretenders, was justified by von Mehring and Minkowski when in 1888 they rendered a dog diabetic by the removal of his pancreas, thus proving the pancreatic origin of the disease. Banting and Best also proved the value of experimental studies on animals when they saved, or prolonged, the lives of diabetic dogs and diabetic human beings by the use of insulin.

Bernard Shaw's drama, "The Doctor's Dilemma", is being played in the United States today, while vivisectionists and societies for the prevention of cruelty to animals continue pro-

testing against the use of animals in experimental medicine. In this land of wise and foolish men who have the right to free speech, no matter how idiotic fanatics' views may seem to sensible people, they must be tolerated; but in the language of Christ, the Great Healer, "Father, forgive them for they know not what they do."

BANTING AT THE AMERICAN COLLEGE OF PHYSICIANS. I went from Toronto to Philadelphia to attend the American College of Physicians. Banting was to be a guest speaker at the meeting, and he and I traveled together from Toronto to Philadelphia.

An amusing incident occurred during my visit in Toronto, which illustrated the charming hospitality of the Canadians and had a bearing on my trip to Philadelphia with Banting. A wealthy manufacturer friend and his lovely wife, whom I had known in Washington, invited me to dinner in their home. Shortly before the end of a delightful evening my hostess said to her husband, "I wonder if we cannot persuade Dr. Harris to take a bottle of Canadian Club whisky home with him." It was during prohibition days in Canada and the United States; and though I am a total abstainer, it did not require any persuasion to induce me to accept the whisky. My host, in presenting the quart of whisky to me, said, "Dr. Harris, you are from the South and are not accustomed to walking on ice-covered streets, and to show you how valuable we think this preprohibition whisky is, I will tell you of an accident to one of my friends, who had a bottle in his hip pocket. He slipped and fell on an ice-covered street. As he arose, he felt something warm trickling down the back of his thigh and leg; he exclaimed, 'I hope to God it's blood!'"

I was careful in walking to my cab and had the full quart several days later when Banting and I boarded the train in Toronto. During the evening Banting had several drinks of the precious golden liquid. In the several hours before we retired on the sleeper that night, he told me of a number of incidents which had occurred during his turbulent career while he and "Charlie," as he affectionately called Best, were working out the problems connected with the isolation and purifying of insulin so that it could be used clinically. Some things, which

he told me in confidence, will never be divulged because I believe he would not want them published; but his story of the discovery of insulin will be narrated as he told it to me during the course of many conversations. Most of the facts that I shall present have been verified in a number of articles published by Banting and his friends during his life.

On our arrival in Philadelphia the hotel was so crowded that Banting and I occupied the same room during the meeting. It was the first large medical gathering in the United States that he had attended, and it was my privilege to introduce him to many distinguished American physicians. It was interesting to observe Banting's shyness and modesty in meeting men whom he said he had known of from their contributions to medical literature. He felt it a great privilege to meet them and was somewhat awed in the presence of great clinicians like Levellys F. Barker and Alfred Stengel. Banting, however, was the "observed of all observers" at the College though he seemed entirely unaware of the fact that he was anything but an obscure Canadian doctor in the presence of great teachers of medicine.

It was the first time Banting had talked to any large gathering of physicians and he became frightened when he thought of addressing that great audience. As the time approached for his address, he said he knew that he would fail. A few minutes before he was to speak, he went out of the auditorium and motioned to me to follow him. We went to our room, and he took two drinks of my precious Canadian Club whisky. They seemed to remove all his inhibitions for he made a very creditable talk that was received with enthusiasm by an audience which included many of the leading clinicians in the United States. Following his talk he had to have another drink before he recovered completely from his stage fright. Banting did not drink to excess, since in three days he had consumed only a pint of my historic whisky. I may add that I did not touch a drop of it, for the reason that I enjoy life more when I abstain from the use of all alcoholic beverages. What happened to the other pint of that precious Canadian Club whisky is another good story not connected with Banting.

BANTING'S EARLY LIFE. Frederick Grant Banting was born in Alliston, Ontario, Canada,

Nov. 14, 1892. He attended the Alliston public schools, Victoria College for two years and the University of Toronto for five years. When he was twenty-one in 1912, he entered the Medical Department of the University of Toronto. Banting wanted to fight the Germans in World War I; and in 1915 he left college after three years' study of medicine, to enlist in the Canadian army as a private, but was ordered back to the University of Toronto to complete his medical education. After graduation in medicine in 1916, young Banting immediately reenlisted in the Canadian Army and was commissioned Captain in the Fifteenth General Hospital Unit of the Canadian Army Medical Corps.

In the Battle of Cambrai in September 1918, Banting received a wound of the hand, his "blighty" as the British proudly called their war wounds. The wound was so severe that amputation was thought necessary. Banting is said to have refused to be operated upon, saying emphatically, "I am going to keep that arm." Somehow he must have known that he would need it in winning one of the great victories of peace in years to come. Banting was awarded the Military Cross by the British government for "valorous conduct during the Cambrai engagement."

THE UNSUCCESSFUL YOUNG SURGEON. Following the close of World War I, after serving as resident surgeon in the Hospital for Sick Children in Toronto in 1919 and 1920, Banting located in London, Ontario, where he got little encouragement to practice medicine, but where as an instructor in physiology in the University of Western Ontario he received the inspiration which culminated in the greatest medical discovery of the twentieth century. In an address on "The Early Story of Insulin" at the opening of the Lilly Research Laboratories, he related his four months' experience as a practitioner of medicine in these words.

I commenced the practice of medicine in London, Ontario. After I had observed the conventional office hours of 2 to 4 p. m. and 6 to 8 p. m. for twenty-eight consecutive days, my first patient presented himself. At the end of the month I had four dollars on the books. The succeeding months were not much more gratifying. However, in October, when the medical school opened, I was successful in obtaining an appointment as demonstrator in the Departments of Physiology and Anatomy which gave me access to these laboratories. On 30th October, it so happened that in the early part of the evening I was preparing a lecture on the relation of the pancreas to diabetes, and when the lecture was

completed I commenced the perusal of the newly arrived November number of "Surgery, Gynecology and Obstetrics." This journal contained an article by Moses Barron in which he pointed out the analogy between the degenerative changes which follow the experimental ligation of the pancreatic duct, and the blockage of the duct by gall-stones.

After reading the article by Barron I was unable to sleep. There seemed to be in some vague way a relation between the islet cells of the pancreas and clinical diabetes. There seemed also to be a means of attacking the problem of extracting the islet cells by ligating the pancreatic duct. It was not until two o'clock in the morning that I was able to crystallize the idea into a form that would lend itself to experimentation. At this hour I arose and wrote in my notebook the following words: "Ligate pancreatic ducts of dogs. Wait six to eight weeks for degeneration. Remove the residue and extract." The following morning I consulted a number of the professors at London concerning the idea, and inquired as to the possibilities of obtaining facilities for experimental work. Unfortunately, it so happened that since the new medical school was not completed, facilities and assistance could not be provided. On the advice of Professor Miller, I went to the University of Toronto, my Alma Mater, to consult Professor J. J. R. MacLeod. I had never met Professor MacLeod until this time, but his reputation as an authority on carbohydrate metabolism was well known.

After I had presented my case, Professor MacLeod asked me what I hoped to accomplish when the best-trained physiologists had not succeeded in establishing or proving that there was an internal secretion of the pancreas. My request was that I should be given ten dogs, an assistant for eight weeks and facilities for doing blood and urine-sugar estimations.

BANTING'S QUALITIES OF GENIUS. Osler, in discussing what he called the "bread and water" period of a doctor's life, stressed the value of leisure to study for a young man beginning the practice of medicine. The wisdom of Osler's advice was exemplified by Banting, who did not waste his golden hours of leisure in fear of failure, nor in riotous living, but took advantage of the opportunity to prepare himself to teach physiology and practice surgery. Banting's mind was on his profession. Genius is inspired in the man who is prepared to translate opportunity into action when it knocks on his door.

Banting was poor, very poor, at the time he had the vision and the courage to attempt to isolate from the islet cells of the pancreas, the hormone which he believed, and many others before him had believed, would control one of the most dreaded diseases with which human beings are afflicted; but his poverty did not deter him from following his vision. He sold his automobile and the few medical books that he owned in order to get the money to pay his expenses while he was undertaking what seemed an impossible task to one of the greatest physiologists in the world. It is said also that Banting was engaged to marry at the time he

left London, but that the girl of his dreams would not wait for him and married another man soon afterward. Had she known that if she had waited for him, in fifteen years she would have become Lady Banting, she might have remained constant to her poor but brilliant doctor fiancé.

No finer example of courage has ever been recorded in history than was demonstrated by Banting in his quest to find the remedy for diabetes mellitus. He also had another quality of character essential to genius, and that was persistence; some call it stubbornness. A man with less courage never would have undertaken what others thought was a wild experiment, and one with less persistence would have been discouraged by the obstacles that he had to hurdle. Yet this young Canadian seems never to have faltered in accomplishing what appeared to be the impossible until the hormone of the pancreas which regulates carbohydrate metabolism was isolated and used successfully in controlling diabetes in human beings.

Banting's beloved and brilliant confrere, "Charlie" Best, in a beautiful tribute published in "Science" (March 14, 1941), outlined the philosophy believed in and adhered to by his dead friend, as expressed in two of the closing paragraphs of Banting's Edinburgh address. Best said:

Banting was true to his philosophy of life which he, at one time, described in the following simple and effective words:

"It is not within the power of the properly constructed human mind to be satisfied. Progress would cease if this were the case. The greatest joy in life is to accomplish. It is the getting, not the having. It is the giving, not the keeping.

I am a firm believer in the theory that you can do or be anything that you wish in this world, within reason, if you are prepared to make the sacrifices, think and work hard enough and long enough."

DIABETUS MELLITUS BEFORE THE BANTING ERA. The ancient Egyptians, long before the time of Moses, observed polyuria as a disorder, but they did not mention the other manifestations of diabetes. Profuse urination was mentioned in one of the oldest extant medical compilations the "Papyrus Ebers"; but diabetes as a disease appears not to have been known at the time of Hippocrates, the Father of Medicine (460-377 B. C.), who on the Aegean island of Cos, recorded in Greek what was then known about diseases that afflict mankind.

Aurelius Cornelius Celsus (30 B. C.-30 A. D.) appears to have been the first to describe

a disease entity associated with polyuria. Celsus wrote, "When urine, even in excess of drink, and flowing forth without pain, causes emaciation and danger," but he did not give the disease a name.

Aretaeus of Cappadocia (30-90 A. D.) seems to have been the first medical writer to use the word diabetes, which was derived from two Greek words meaning respectively to run through and a siphon. Aretaeus described polyuria and emaciation as manifestations of diabetes, a disease that always ended in death. It later was noted by the Greeks that bees swarmed around the urine of diabetics and that it had a sweet taste. The Greek word mellitus, meaning honey, was then added to diabetes, the term which Aretaeus used to describe the syndrome of which polyuria was a part. Thus, the term diabetes mellitus has been used for nearly two thousand years to describe a disease, the treatment of which was of but little avail until 1922.

Before Banting's discovery of insulin diabetes was the *bête noir* of physicians. Patients with severe diabetes, children in particular, always died after a miserable existence of from a few weeks to a few years. Mild diabetics lived sometimes for years without great inconvenience, but a large proportion of them ultimately developed gangrene of one foot or both, requiring amputation. In preinsulin days it was estimated that about one third of all adult diabetics had to have one or both legs amputated. Other mild diabetics developed furunculosis, carbuncles and other skin complications, which in many cases resulted in septicemia and death. Neuritis, the most painful complication of diabetes, and for which nothing could be done, was responsible for many a diabetic's becoming a morphine addict. Pneumonia, "the old man's best friend" as Osler called it, was likewise the diabetic's deliverer from a life of misery in many cases. The bacillus of tuberculosis found fertile soil for its propagation in the tissues of the undernourished diabetic; and it was estimated that about one half of all diabetics before they died became afflicted with "the great white plague" in the days before the discovery of insulin. In others acidosis, diabetic coma, came as euthanasia to end the sufferings of the thirsty, hungry, emaciated, hopelessly ill victim of diabetes.

I would not leave the impression that nothing could be done for diabetes before the discovery of insulin because much had been accomplished in the dietary management of the disease and in ameliorating the symptoms of complicating diseases. Perhaps the most thorough experimental studies on diabetes in animals and clinical observations on human diabetics that had been made since diabetes was first described by Celsus about the time Christ was born, were made and recorded by Frederick M. Allen in the two decades before insulin was discovered. He had developed the undernutrition diet, which enabled many diabetics to prolong their lives before insulin was discovered. Allen also insisted upon caloric feeding for diabetics and taught them to calculate their diets in carbohydrates, proteins and fats. Among other American physicians who had made notable contributions to the management of diabetes may be mentioned Elliott P. Joslin and Rollin Woodruff. The fact is that insulin would not be of much value in the treatment of diabetes were it not for the scientific methods of dieting evolved by Allen, Joslin, Woodruff and others.

THE POSTINSULIN ERA. The use of insulin adjusted to a well balanced diet calculated to meet the nutritional requirement of the individual diabetic, has robbed diabetes of its terrors and placed it among the diseases amenable to medical treatment. Today the physician who has a working knowledge of nutrition as applied to diabetes and who knows how to use insulin, can promise an intelligent diabetic that if he will follow the diet prescribed for him and use insulin as needed, diabetes will not shorten his life nor interfere with his efficiency or happiness.

Now a diabetic child, properly cared for, will grow faster and larger and will develop finer traits of character than his less fortunate brothers and sisters and friends who have not diabetes. The reason is that the diabetic child with the use of insulin now may live on a diet which is ideal for all growing children while his less fortunate playmates eat what they want instead of what is good for them. The self denial which the diabetic child must practice develops character. In every large school and college in the United States there are diabetic boys and girls who lead their classes and who are profi-

cient in all the sports, from ping pong to football.

All the complications of diabetes may be avoided by the intelligent diabetic who has the will to do right; but, as in preinsulin days, it is a sad fact that with the ignorant and self-indulgent diabetic who will not follow the rules of the game of outwitting diabetes, the few and numbered days of his remaining life, like "the paths of glory lead but to the grave."

THE RECOGNITION OF HYPERINSULINISM, A NEW DISEASE ENTITY. Banting, Best, Campbell, Fletcher and their associates are indirectly responsible for the recognition of a new disease entity, a disorder of insulin secretion, the opposite condition to diabetes. The Toronto group found that overdoses of insulin (induced hyperinsulinism) produced definite symptoms, called by them the insulin reaction; and they published a number of papers in which the symptoms that followed overdoses of insulin were accurately and graphically described. No one has ever described the symptoms which follow overdoses of insulin in diabetics better than did Banting in his address before the International Conference on Health Problems in Tropical America, at Kingston, Jamaica, July 21-31, 1924. He said:

When a patient is given too large a dose of insulin the blood-sugar falls below its normal level, producing marked reaction, which begins in from one and a half to six hours after the patient receives the overdose. The average time is three to four hours. The interval varies with the individual, the dosage, and the food ingested. The first warning of this hypoglycemic reaction is an unaccountable anxiety and a feeling of impending trouble, associated with restlessness. This is frequently followed by profuse perspiration.

At this time there is usually a great desire for food. Very soon the patient will notice a certain sensation as of clonic tremor in the muscles of the extremities. This can be controlled at first. Coordination, however, is impaired for the more delicate movements. Coincident with this, there is a marked pallor of the skin with a rise in pulse rate to one hundred or one hundred and twenty beats per minute. Pupils become dilated. The blood pressure falls about 15 to 25 millimeters of mercury, and the patient feels faint. The ability to do physical or mental work is greatly impaired. In a severe reaction there may be a considerable degree of aphasia, the patient having to grope for words. The memory of names and figures may be quite faulty. As the blood sugar falls to a still lower level the blood pressure and body temperature also fall and collapse, unconsciousness, convulsions, and finally death, may occur.

The ingestion of carbohydrate in the form of orange juice (4 to 8 ounces), glucose or candy, relieves these symptoms in from 5 to 10 minutes. If untreated, and coma or convulsions have occurred, 10 to 15 minims of epinephrin will usually restore consciousness within 3 minutes, at which time glucose should be given by mouth to prevent further recurrence.

A SIMPLE OBSERVATION. During my week in Toronto in March 1923, after I had made the

rounds with Banting and his associates in the diabetic wards of the Toronto General Hospital one morning, we stopped on the ice-covered sidewalk to discuss the reaction which follows overdoses of insulin. I said to him, "Since you have proved that diabetes is due to a deficiency of insulin, there must exist an opposite disease characterized by an excessive secretion of insulin by the pancreas, and, if so, the symptoms should be the same as those the patients we have just seen complained of after having had overdoses of insulin." I asked him if he or his associates had observed symptoms of an excessive secretion of insulin in laboratory animals or human beings. Banting replied that neither he nor his confreres had seen any such cases. I asked him if he had found in medical literature any reference to a condition, or disease, caused by an excessive secretion of insulin. He replied that he had not. I also said to Banting, "I am sure that I have seen patients who neither had diabetes nor had used insulin, whose symptoms were similar to those that we saw this morning in diabetics from overdoses of insulin."

THE FIRST RECOGNIZED CASE OF HYPERINSULINISM. At the time I was discussing with Banting the possible existence of a disease due to excessive secretion of insulin, I could not recall the names of patients who had symptoms which could have resulted from this cause. Within a week after my return to Birmingham from Toronto, Dr. J. G. Palmer of Opelika came into my office about noon (March 19, 1923) and in his characteristic good-humored badinage said, "Harris, you are a sorry doctor. About a month ago you x-rayed me; I swallowed that terrible stomach tube; you made me take a lot of medicines and gave me a diet which I have followed rigidly, and I am not one bit better." I asked him to tell me his symptoms. He said, "Every morning an hour before dinner I have the jitters. I get hungry, weak, nervous, tremble and break out in a heavy sweat. I become so irritable that I cannot look after patients. These symptoms are relieved by taking a soft drink or eating. I feel fine for three or four hours after dinner, but late in the afternoon I get jittery again and have to take a soft drink. I wake up in the middle of the night and cannot sleep because of the same symptoms. I have the jitters now. I had an early breakfast and am terribly hungry."

In taking case histories we record the patient's complaints in their own words; a month before, about a week before I went to Toronto, this patient had used practically the same words in describing his symptoms. The thought flashed across my mind that his symptoms might be due to hypoglycemia, and I asked him to go back to the laboratory for a blood sugar test. The blood sugar was low, 65 milligrams per hundred cubic centimeters of blood. We then gave him dextrose, and in a few minutes he said that all the symptoms were relieved. We gave him no medicines, but since he was overweight, he was advised to eat three small meals a day and to take an orange or other fruit about three hours after meals, at bedtime and if awake at night. This simple change in diet prevented the recurrence of symptoms until his death from another cause about ten years later. The word hyperinsulinism was coined in March 1923 to record the diagnosis in this case.

The symptoms of this patient illustrate the type of mild insulin "jitters" occurring most frequently. It may be best for a person who has such symptoms to have blood sugar tests to confirm the diagnosis of hyperinsulinism; if, however, he will leave sweets out of his diet, eat three small meals a day, and take fruit, fruit juices or milk three hours after meals, he may be able to cure himself without consulting a physician.

HYPERINSULINISM IN A POTENTIAL DIABETIC. Our second case (Oct 5, 1923) was that of a patient who had been under observation for several years. He said that every day before dinner and late in the afternoon he became so weak and hungry that he believed he would die if a meal were delayed an hour. He had a low blood sugar (0.065) about noon, and the next day in a sugar tolerance test his blood sugar fell to 67 milligrams per hundred cubic centimeters of blood in three hours. Two hours later his blood sugar was probably much lower for when enroute home he became weak, trembled, perspired freely and became anxious, fearing he would die unless he ate something. All his symptoms were relieved by eating.

Previously this patient had had sugar in the urine at times and he was regarded as a potential diabetic. He was placed on a diabetic diet high in fats, and low in carbohydrates with fruit three hours after meals, a regimen which

prevented symptoms so long as he adhered to it. He craved sweets and several times went on what he called a "candy jag." Invariably the eating of candy was followed by attacks of the "jitters" when he got hungry. It may be added that excessive indulgence in candy, soft drinks and other cane sugar products is one of the causes of hyperinsulinism.

THE FIRST REPORTED CASES. At a meeting of the Virginia State Medical Association in October 1923 in a paper on "The Etiology of Diabetes" brief mention was made of these two cases which had been diagnosed as hyperinsulinism. It was also suggested that hypoinsulinism may be used in scientific nomenclature as synonymous with diabetes mellitus. In one of these cases the patient, who had symptoms which proved to be due to hypoglycemia, was overweight and had had glycosuria previously. He was considered a potential diabetic. It therefore was suggested that hyperinsulinism may precede diabetes mellitus (hypoinsulinism) just as hyperthyroidism and hyperpituitarism have been known by involution to change into the undersecretion phases, hypothyroidism and hypopituitarism respectively. This paper was published in the Virginia Medical Monthly in January 1924 when for the first time the words hyperinsulinism and hypoinsulinism appeared in medical literature.

THE FIRST PAPER ON HYPERINSULINISM. By June 1924 we had found 5 patients who had symptoms similar to those observed in diabetics from overdoses of insulin (induced hyperinsulinism), all of whom had low blood sugars (hypoglycemia) at the times when their symptoms occurred. These cases were reported in an article entitled "Hyperinsulinism and Dyinsulinism," read at a meeting of the American Medical Association in Chicago in June 1924. Seventeen years after the publication of that paper, with an experience of treating at least 500 cases diagnosed as hyperinsulinism and dyinsulinism, and after a careful study of the literature including reports of cases from practically every country in the world in which scientific medicine is practiced, I find it pleasing to reread my conclusions of 1924 and to find that there is so little to take back.

THE FREQUENCY OF HYPERINSULINISM. Since the first cases of hyperinsulinism were re-

ported in 1923, clinicians all over the world have reported many cases. Cammidge of London reported 200 cases of hypoglycemia in 1930. Sigwald of Paris has written a book on the subject. Sippe and Bostock of Australia in reporting 30 cases in 1932 said they have more cases of hyperinsulinism than they had of diabetes in a given time. Hartmann of Washington University in St. Louis reported 285 cases of hypoglycemia (low blood sugar) in children. Martin of Johns Hopkins reported 225 cases in which the patients had low blood sugars. Goldzieher of New York City reported 125 cases.

Powell of West Monroe, La., found 25 cases of hyperinsulinism in his general practice in one year. His observation that many children, who are considered dull and who are difficult to manage at home and in school, have hyperinsulinism is an important contribution to medicine. Regarding the frequency of hyperinsulinism Powell said:

Ample case reports are now in the literature to show that hyperinsulinism causes symptoms varying from drowsiness to narcolepsy, from vertigo to epilepsy, and from mental deficiency to mental degeneracy. Unfortunately all the cases are not in the literature; they are to be found in every doctor's clientele, and sad to relate, most probably are untreated.

SEVERE HYPERINSULINISM. Hyperinsulinism is not a simple disease in many cases. Often it is associated with disorders of the pituitary, thyroid and adrenal glands, and sometimes it may be very difficult to diagnose and cure. In many of the severe cases convulsions occur. Such cases usually are diagnosed erroneously as epilepsy.

Wilder in 1927 reported the first case of hyperinsulinism due to an islet tumor of the pancreas. In this case an exploratory laparotomy revealed an inoperable tumor which at autopsy proved to be an islet cell carcinoma. In cases due to adenoma of the pancreas, when the diagnosis has been made early, surgical removal of the tumor has not failed to cure the patient. I regret that in the time allotted me it is not possible to give credit to many others who have made valuable contributions to the knowledge of perverted carbohydrate metabolism in which spontaneous hypoglycemia occurs.

BANTING AS A MEDICAL TEACHER. When insulin was discovered, the medical profession generally knew but little regarding the principles of nutrition upon which the dietary man-

agement of diabetes was based. The use of insulin in the treatment of diabetes was of limited value without training in calculating the food values of the diets given to diabetics. In order, therefore, to inform the medical profession on the use of insulin in the treatment of diabetes, Dr. Graham, Professor of Medicine, and his associates, Drs. Campbell and Fletcher, in the Medical Department of the University of Toronto, initiated a series of courses in postgraduate instruction on the use of insulin and the dietary management of diabetes.

Since I had associated with me in our Clinic in Birmingham, Dr. J. P. Chapman, now of Selma, Alabama, a very capable clinician, the lamented Dr. W. J. Geddes, a diabetic, who had graduated from the University of Toronto and who had had a year's training in the diabetic wards of the Toronto General Hospital, and a dietitian, Miss Nora Greene, who had received her training in the Toronto General Hospital, we arranged a series of postgraduate seminars lasting two days each, based upon those given at the University of Toronto, to which Southern physicians were invited. Nearly 600 physicians attended the three seminars.

Dr. Banting was invited as guest speaker at the first seminar to deliver two addresses, one on "The Use of Insulin in the Treatment of Diabetes" and the other on "The Management of the Complications of Diabetes." He read his two addresses. They were gems of descriptive rhetoric and diction, clear and concise; and the 250 physicians, who listened with the attention due an authority on diabetes, learned what many of them had come long distances to hear. Embarrassed when he began each address, he soon forgot himself in his desire to teach his subject to eager listeners and interpolated his text with many interesting observations. He also held a clinic, lasting for an hour, in which he discussed the management of several of our diabetic cases. His discussion of the problems met with in treating each of the several diabetics presented likewise showed that he had a thorough knowledge of his subject and demonstrated that he was an impressive teacher of clinical medicine.

Banting was my house guest for the two days, and Mrs. Harris and I greatly enjoyed having him in our home. Much to his discom-

fort, we gave a dinner and reception for him at the Birmingham Country Club which he endured with smiling fortitude, but which I am afraid he did not enjoy. He was not antisocial. He knew and practiced the amenities of polite society, but he was retiring and reticent by nature, preferring to be with a very few selected friends rather than to be a social lion.

While in Birmingham, Banting made a never-to-be-forgotten impression on the Southern doctors, who vowed that they learned more about diabetes from hearing Banting for two days than they had learned in their professional lives up to that time. They returned to their homes to apply in the management of diabetes what they had learned. Not infrequently in the eighteen years that have elapsed since Banting's memorable visit to Birmingham, physicians have expressed to me their appreciation for what they learned from the young Canadian, who came more than a thousand miles from Toronto to Birmingham to tell in plain and simple language what general practitioners desired to know about the use of insulin in the treatment of diabetes mellitus. Some of them expressed the opinion that when Banting was talking, they realized they were listening to the words of an extraordinary man, a genius, who will go down in history as one of the immortals in medicine.

BANTING IN THE TROPICS. In July and August of 1924 I had the privilege of traveling with Banting for two months in the West Indies and Central America. The occasion was the International Conference on Health Problems in Tropical America. W. E. Deeks, Medical Director of the United Fruit Company, called the conference, to which were invited a number of distinguished guests, all of whose expenses were paid by the United Fruit Company. Most of those who participated in the Conference, which lasted for two weeks in Havana and at the Myrtle Bank Hotel in Kingston, Jamaica, were recognized authorities on the tropical diseases which they discussed. Among them was a number of celebrated Britishers, Sir Leonard Rogers, Sir James Simpson, Sir Arbuthnot Lane and Sir Arthur Newsholme. Eight or nine American physicians were in the party. Banting, however, was the synosure of all eyes, a position which he did not

altogether enjoy. The physicians in Havana, Jamaica, Guatemala, Honduras, Costa Rica and Panama were as much interested in Banting's methods of treating diabetes as we were in the United States. They all wanted to meet Banting, and he was invited to talk and hold clinics on diabetes everywhere that we went. Though he was an interesting talker when on his feet, he did not like to make speeches and he declined most of the invitations.

Banting's address on "Insulin in the Treatment of Diabetes," delivered in Jamaica, was one of the best of the many which I heard him deliver. I have read it since his death; and, in my opinion, it is the simplest, clearest, most concise discussion of the underlying causes of diabetes and the use of insulin in its treatment that has ever been written. While Banting was not in any sense an orator, he was an impressive talker, who expressed his ideas in plain and forceful language.

The International Conference on Health Problems in Tropical America was called primarily for a discussion of the recent advances in the prevention and treatment of the diseases that were problems of the medical department of the United Fruit Company, which cared for the health of 100,000 employees and their families, making a total population of more than half a million people. The heads of the United Fruit Company hospitals in eight or ten countries and physicians representing all the countries of Central and South America were invited to attend. The essayists, who were considered authorities on the subjects they discussed, were also requested to study health conditions and the prevention of disease in the countries they visited as the guests of the United Fruit Company and the governments of the several countries. Banting discussed diabetes and the use of insulin, and he studied the conditions which might account for the relatively few cases of diabetes occurring among the lower classes in the tropics. Incidentally, I may mention that I was invited to discuss pellagra and to study the food conditions and nutritional diseases on the various banana plantations the United Fruit Company maintains in the West Indies and Central America.

Banting's observations regarding the relatively low incidence of diabetes among the in-

digent and laboring classes in the tropics and its relatively high incidence in the same localities among the upper classes, who can afford to buy refined cane sugar products, is of more than passing interest. It should be added that Deeks had preached for years that the high carbohydrate diets, particularly of refined cane sugar products, which all classes consume, is the cause of many diseases, including diabetes and pellagra, which occur in the tropics.

SIR FREDERICK GRANT BANTING, K. B. E., M. B., M.C., F.R.C.S., L.R.C.P., M.D., D.S.C., L.L.D., SC.D. In a recent volume of "Who's Who in Canada," a biographical sketch of Banting includes a list of his degrees, collegiate and honorary, as in the foregoing subtitle. No one ever deserved honors more than he, and no distinguished man ever appreciated such recognition more; yet all the titles, medals, prizes and honorary degrees that were given him did not change the humbleness of this simple child of genius. He was the same kind and gentle Banting to his friends after he was knighted by the Ruler of the British Empire as he was before he achieved fame.

The Journal of the American Medical Association, March 8, 1941, lists the honors bestowed upon Banting as follows:

Since 1923 he has been professor of medical research in the Banting and Best Department of Medical Research, a chair which was established by the University of Toronto in recognition of his work on insulin. It was proposed in 1923 that a \$1,000,000 Banting Medical Research Foundation be established. Dr. Banting was the first contributor to the fund, donating \$10,000, a portion of his share of the Nobel Prize. In 1930 the Banting Institute was opened; the cost of the building was contributed by the provincial government, the university and the Banting Research Foundation, which raised funds by popular subscription. Dr. Banting was honorary consulting physician at the Toronto General and Toronto Western hospitals.

In 1922 he was awarded the Starr Gold Medal and the George Armstrong Peters Prize and in 1923 the Charles Mickle Fellowship and the Reeve Prize, all of the University of Toronto. In 1923 he shared the Nobel Prize with Dr. J. J. R. MacLeod. This they divided with Drs. Best and Collip. In the same year he was awarded the John Scott Medal by the city of Philadelphia and received a life annuity of \$7,500 from the parliament of Canada; in 1924 he was awarded the Rosenberger Gold Medal by the University of Chicago; in 1927 the Cameron Prize by the University of Edinburgh; in 1931 the Flavelle Medal by the Royal Society of Canada; in 1934 the Apothecaries' Medal of London; in 1936 the F. N. G. Starr Gold Medal by the Canadian Medical Association.

Dr. Banting was knighted a Commander of the Civil Division of the Order of the British Empire in 1934. He was a licentiate of the Royal College of Physicians, member of the Royal College of Surgeons, fellow of the American College of Physicians, fellow of the Royal College of Surgeons of England, fellow of the Royal College of Surgeons of London, fellow of the Royal

College of Surgeons of Canada, fellow of the Royal Society and fellow of the Royal College of Physicians. He was an honorary fellow of the Academy of Medicine of Toronto and of the New York Academy of Medicine; honorary member of the Norwegian Medical Society in Oslo; foreign correspondent, Académie royale de médecine de Belgique; La Società medico-chirurgia de Bologna; corresponding member of the Royal Medical Society of Budapest; member of the Canadian Medical Association, American Society for Pharmacology and Experimental Therapeutics, British Physiological Society, Association of American Physicians, Canadian Chemical Association, American Association for Cancer Research and the Imperial German Academy of Natural Sciences.

BANTING ON HIGH CARBOHYDRATE DIETS IN DIABETES. While on a visit to Toronto in 1935, I discussed with Banting the subject of diets in diabetes. I expressed the opinion that the basic principles of a diet high in carbohydrates and low in fats seemed sound and mentioned the work of Rabinowitch of Montreal, a pioneer in advocating a higher intake of carbohydrates and a reduction in fats in diabetes. He said that he knew "Rabby", as he called Rabinowitch, well and thought highly of his work. He related an amusing incident which he thought might have had some influence in changing "Rabby" from starving his diabetics to giving them a liberal allowance of carbohydrates. He said that a big, husky, hungry diabetic Canadian woodsman, who made maple sugar, consulted him and told him of the diet that Rabinowitch had been giving him. It consisted of bran biscuits, five per cent vegetables and a more liberal allowance of meats and fats. Every few minutes while talking, he took from a can in his pocket a handful of thrice cooked cabbage, which he ate greedily. He presented Banting with a box of maple sugar, eyeing it as Banting said, "like a hungry dog." After listening to his story, Banting told him to go back and tell "Rabby" that he said for him to eat the thrice cooked cabbage and also to eat liberally of his own maple sugar.

Although he had had nothing to do with clinical diabetes for a number of years, the diet high in carbohydrates and low in fats seemed rational to him, he said. He was under the impression, however, that diets high in fats and low in carbohydrates were being used in the diabetic wards of the Toronto General Hospital at that time.

BANTING A MILITARY MARTYR. Banting evidently realized in 1938 that another World War was imminent because three years ago he

formulated plans for research in attacking the medical problems involved in military aviation. He was appointed chairman of a Committee on Medical Research and of a Subcommittee on Aviation Medicine of the National Research Council of Canada. His committee worked out improved methods of preserving and "banking" blood for use later in transfusions. It was not an accident that the researches which made possible the storage of blood in large quantities for use in war were carried out by Banting's friend "Charlie" Best, in the Connaught Laboratories in Toronto.

Within a week after Great Britain entered World War II, Banting volunteered for service. The British government has not released for publication the activities in which Sir Frederick Banting was engaged before his tragic death; but it is said that he was studying methods for preventing the brief periods of unconsciousness experienced by aviators in diving from great heights to lower levels. It also has been said that Major Banting was studying medical problems associated with tank warfare.

On Friday, February 21, Sir Frederick Banting crashed to his death in a military airplane while en route to England. The reasons for his having been ordered for service somewhere in England have not been announced; but it is said that he had requested the privilege of aiding his countrymen in England in the event of invasion by the hordes of barbaric Huns under Hitler. Whatever may have been Banting's mission, he proved that he was willing to give up his life, and he did make the supreme sacrifice for his country, for the United States and for all the other free nations of the earth.

The Associated Press dispatch of February 25 said, "The papers detailing Sir Frederick Banting's invaluable contribution to Britain's war effort were found intact Tuesday in the snow drifts around the transatlantic plane in which he crashed to death last Friday while en route to England. He thus bequeathed, for others to carry out in practice his secret medicomilitary project officially described as of 'high national and scientific importance.'"

Captain Joseph Mackey, in charge of the airplane in which Sir Frederick Banting was the only passenger en route to England, described the crash in a remote spot in Newfoundland which ended the dramatic career of a medical

genius and a benefactor of mankind. He said that Banting never regained complete consciousness after the crash, but that in his delirium "he spoke and acted as though he were a military officer on duty, or a professor in a clinic. He commanded me to take down dictation, and he dictated streams of unintelligible medical phraseology." Captain Mackey felt that he might have been witnessing "the struggle of a great mind to fight against death in a race to record his last thoughts. Perhaps medical information of priceless character was lost in those hours."

BANTING'S PLACE IN HISTORY. The good that a man accomplishes does not end when he passes from life into "the dim land of dreams," it goes on through the ages to eternity. Though the mortal remains of Frederick Banting have been interred in his beloved homeland, the memory of his accomplishments will be enshrined in the hearts of men wherever scientific medicine is practiced until the end of time. Every day somewhere in the world in the years to come, when the archfiend, Hitler, and the fearful ruin he has wrought will have been forgotten, grateful physicians will witness the miracle of bringing back to life moribund victims of diabetic acidosis and coma by the use of insulin.

In the ages to come countless millions of diabetics, who may laugh and love and live long, efficient lives because they can use insulin in controlling diabetes and in preventing its complications, will give thanks to Banting, their benefactor, for his legacy to mankind. Frederick Banting will go down in the history of medicine with Louis Pasteur, Lord Lister, Marion Sims and other geniuses who have bequeathed to posterity gifts wrought by their brains, hearts and hands that all the wealth of the world could not purchase. Their lives should be held up constantly before students of medicine and surgery as examples worthy of their emulation. Monuments will be erected to Banting to commemorate his achievements, and other memorials will be established in his honor, but they will not add to the glory of one who, though he did not seek or care for fame, became immortal. Banting felt that in achieving he was rewarded sufficiently.

FALLACIOUS VIEWS CONCERNING RHINOLOGIC SURGERY AND FAC- TORS INFLUENCING MORE SUCCESSFUL RESULTS

A. R. Hollender, M. D.
Miami Beach

The erroneous conception prevalent not only among the laity but in many medical circles to the effect that all intranasal operations are followed by harm rather than benefit has tended to discourage many sufferers from obtaining proper aid for certain rhinologic conditions. It cannot be successfully denied that there is some justification for this attitude, but as with most generalizations, the true relation of cause to effect has not been considered in a critical manner. Under certain conditions intranasal operations are not only scientifically indicated but clinically of great value. There is no struggle here between rational conservatism and irrational radicalism; if such a conflict existed, there would be no problem to discuss.

At the outset, the same fundamental principles that govern general surgery apply also to rhinologic operations, the difference consisting merely of technical modifications to comply with the anatomic and physiologic peculiarities of the structures concerned. It follows then that failures in rhinologic surgery result from violations of these underlying principles, and their correct observance logically leads to therapeutic successes. The reasons for failures and the steps necessary to avoid them are briefly presented.

SYMPTOMATIC AND THERAPEUTIC ASPECTS OF NASAL AND SINUS CONDITIONS

Certain applied anatomic and physiologic factors have a direct bearing on the choice between surgical intervention and less radical therapeutic measures. The nose is the portal of entry to the air passages. Any obstruction to respiration interferes with the normal function of these passages, and a pathologic process with symptoms of varying degree may then develop. Nasal blockage or obstruction to normal breathing is a common symptom. Its causes are not always local in character. Present knowledge of the influence of constitutional

diseases, allergy and other conditions of the nose has broadened this problem and given it a rational basis.

When the etiologic factors are general, local therapy is naturally contraindicated, the solution being the correction of the underlying cause. When, however, the etiologic factor is local, anatomic for example, nothing short of surgical intervention relieves the symptoms. Lederer¹ aptly made the following suggestion: "One should study the anatomic and pathologic alterations of the nose, and at the same time give due attention to habits of living and eating and the influence of systemic disease." Obviously nasal symptoms, by no means always indicative of nasal disease alone, may frequently be manifestations of other disturbances.

Sneezing, nasal discharge, headache and disturbances of vision are not uncommon complaints in cases of nasal or sinus disease. The presence of a single cause or multiple causes must usually be considered in arriving at a diagnosis irrespective of whether the rhinologic condition is acute, subacute or chronic. After systemic disease and allergy have been excluded as etiologic factors, the treatment is either non-surgical or surgical. Previously committed to a conservative attitude, and still maintaining that position, I nevertheless fully appreciate the futility of nonsurgical treatment when well-defined surgical indications exist. Not long ago I asserted: "The subject of sinus surgery is appropriately included in every program of management of nasal sinus disease. The borderline case is the one which frequently brings about differences of opinion among consultants. While no hard and fast rules can be laid down, it seems reasonable to advocate a thorough trial of nonsurgical methods when the situation is not critical and when no hazard will be added by the time element required."² I added, however, "when the need for surgery is absolute, no other procedure should even be considered solely on the ground that it is nonoperative in nature."²

Aversion to nasal surgery because it has proved unsuccessful in certain cases is due to a prejudiced viewpoint. In most instances the circumstances in connection with a nasal or sinus operation that has proved of no benefit

¹Read before the Sixty-Eighth Annual meeting of the Florida Medical Association, held in Jacksonville, April 28, 29, 30, 1941.

are usually not known. Without an effort to determine them surgery is condemned in nearly every case: even when a patient requires it for obvious reasons and the prognosis appears to be good, advice is given against it. Nasal and sinus operations occasionally prove unsuccessful because (1) they were not properly indicated, (2) they were incompletely performed, and (3) physiologic principles were not adhered to. Similar reasons may likewise account for failure of operative procedures elsewhere in the body.

INDICATIONS FOR RHINOLOGIC SURGERY

It is difficult to generalize on the indications for nasal and sinus surgery. In the main there are two groups of complaints for which operations are performed. The first includes obstruction, discharge and pain associated with complications. The second includes less definite complaints such as headache, optic neuritis, focal infection and vasomotor disturbances. The postoperative results are less satisfactory in the latter group.

Septal resection has been performed for a multiplicity of causes. Deviation of the septum is not of itself an indication for operation, but when secondary symptoms manifest themselves, resection usually restores normal ventilation and drainage of the nose and its accessory cavities. Submucous resection is an operation based on established physiologic principles, and when properly indicated and skillfully and completely performed, has no equal for effectiveness in surgical methods.

Sinus operations are indicated when thorough and intensive conservative measures fail to produce permanent relief. Before an operation is undertaken, a detailed history should be obtained and a thorough examination made. Their importance cannot be sufficiently stressed. A diagnostic study should also include serious consideration of the prognosis. The probable outcome often influences the rhinologist in deciding for or against surgical intervention.

FACTORS INFLUENCING PROGNOSIS

While there are a number of factors affecting the prognosis of nasal and sinus operations,⁸ only the more important ones are considered here.

1. Physical status of the patient. Unless the physical condition of the patient is good, he may not stand the operation satisfactorily. Healing may be delayed and convalescence unnecessarily prolonged.

2. Incorrect diagnosis. Frequently predisposing factors are not properly evaluated through lack of careful study and intelligent interpretation of the clinical picture. In choosing the proper time for performance of the operation the rhinologist should take into account the potentiality of latent infection and the patient's general state. Unless every available diagnostic aid has been employed in arriving at a complete diagnosis, there always remains an element of doubt. Care should be taken not to read in indications which do not exist.

3. Incomplete operation. Often the rhinologist meets the immediate indication only, as in performing an antrum window resection, without at the same time performing septal resection because of pronounced nasal obstruction. Or, he may remove nasal polyps only when their origin is in the sinuses. Such inadequate procedures make for multiple sinus operations. Complete relief of symptoms is not possible under such circumstances.

4. Poor surgical technic and unfavorable reactions during the operation. Poor surgical technic frequently leads to unfavorable end results, but certain factors during the operation such as inadequate or unsatisfactory analgesia or uncontrollable bleeding sometimes interfere with the completeness with which the contemplated operation is performed.

5. Postoperative care. Adequate nutrition and elimination, the comfort of the patient, dressings and the avoidance of complications are important postoperative considerations.

COMMENT

The argument that intranasal surgery always impairs the physiology of the nasal passages does not hold in the light of present knowledge. Surgical procedures necessary to improve ventilation and drainage can be performed without sacrifice of important structures or of mucous membrane and are within physiologic limits. Fallacious views concerning rhinologic surgery are due in no small measure to poor end results in certain cases, but judgment of these cases

should be impartial in relation to the circumstances surrounding each individual case. It is conceded that these surgical procedures, as those elsewhere, will not always result in cure. On the other hand, no one is qualified to state in specific instances how uncomfortable a patient would have been, or that he would have fared better, had an operation not been resorted to.

While the indications for nasal and sinus surgery have been pointed out, allowances must be made also for individual factors. These will often influence the rhinologist's decision negatively even though the indications are well defined. The individual rhinologist's attitude toward surgical procedure plays its role. A number of prominent specialists, who earlier in their careers depended almost entirely on surgery to bring about relief, now have turned utterly against operative procedure, placing their faith in specific immunization. The tendency to label every rhinologic complaint as allergic is irrational. It is equally as irrational to believe that every nasal condition requires surgical intervention.

The case of every patient with a nasal pathologic process should be dealt with as an individual problem. Treatment should meet the indications as they exist. There should be no preference for special therapeutic methods merely because one has become prejudiced against surgical or other procedures. Furthermore, unless experience has demonstrated the efficacy of the treatment to be employed, it should not be considered a suitable substitute for an operation when the latter holds out greater advantages for the patient in obtaining relief from his symptoms. Successful results of rhinologic surgical procedures are obtainable only when the specialist respects the same high standards and criteria that are established for general surgery.

SUMMARY

1. The prevalent tendency to condemn all forms of intranasal surgery because of observed failures tends to deprive many individuals of proper aid attainable by properly indicated and correctly executed operative procedures.

2. The principles governing the indications for and applications of surgical procedures in general surgery apply with equal force to

rhinologic practice, modified only to conform to anatomic and physiologic characteristics of the nose and its adnexa.

3. Individualization is the keynote to successful nasal surgery. It embraces full consideration of local and localized conditions requiring mechanical correction as contrasted with systemic causes which require nonsurgical management.

4. Personal prejudices have no place in any scientific endeavor. Rhinologic practice presupposes consideration of many factors in addition to those manifestly interfering with the physiologic function of the nose. When all evidence has been weighed, one is enabled to arrive at a complete diagnosis and properly to evaluate the pros and cons of surgical intervention.

REFERENCES

1. Lederer, F. L.: Diseases of the Ear, Nose and Throat, Philadelphia: F. A. Davis Co., 1940.
2. Hollender, A. R.: Nasal Sinusitis: Evaluation of Therapeutic Procedures with Special Reference to Conservative Management, E.E.N. & T. Monthly **19:11** (Feb.) 1940.
3. Hollender, A. R., and Cottle, M. H.: Reactions Resulting from Intranasal Surgery, Illinois M. J. **55: 100-106** (Feb.) 1929.

311 Lincoln Road.

OCCLUSIVE LESIONS OF THE PERIPHERAL BLOOD VESSELS

R. B. Harkness, M. D.
Lake City

In discussing occlusive lesions of the peripheral blood vessels, no attempt is made to go into minute detail. Only the salient features of the more frequent lesions of this type are described.

In a paper on the rational consideration of peripheral vascular disease, Ochsner and DeBakey¹ stated:

The rapid strides that have characterized the development in the treatment of peripheral vascular disease during the past decade, have been due in the main to a more rational comprehension of the disease process. Whereas, previously, studies were based on the apparent anatomic-pathologic changes, the recent concept emphasizes the less obvious alterations in physiologic function.

This change to a more practical attitude is helpful in dealing with cases of this disease as the object of treatment is restoration of function. The lesions occurring most frequently are thromboangiitis obliterans, occlusive lesions

¹Read (by invitation) before the Fourth Annual Meeting of the Southwest Medical District, held in Dunedin, October 31, 1940.

due to senile changes, diabetic lesions, occlusive lesions caused by thrombi or emboli, Raynaud's disease and thrombophlebitis.

While thromboangiitis obliterans or Buerger's disease is more frequently seen in colder climates, it is not a rare condition in our subtropical climate. Our normal quota of patients with this disease is undoubtedly greatly increased by the influx of tourists from the North for many sufferers seek the relief offered by milder winters. This syndrome occurs in men with far greater frequency than in women and is a disease of middle age, the majority of cases occurring in men between thirty-five and forty-five years of age.

The lower extremities are affected much more frequently than are the upper. The onset is usually somewhat gradual, but may be sudden. A characteristic limp is one of the earliest signs of the disease. The outstanding symptom is pain, though the patient may complain of cold, tingling, numbness and loss of tactile sense. The pain caused by this condition may easily be confused with that caused by flatfoot or other orthopedic disorder. To avoid overlooking cases of thromboangiitis obliterans, the physician should accustom himself to palpating the arteries of the lower extremities. The pain frequently manifests itself as claudication or muscle cramp brought on by walking. In the advanced stages the patient often suffers pain while at rest. The diagnosis of this disease is not difficult if we keep it in mind. When pain in the lower extremities, aggravated by walking, is complained of by patients, especially men between the ages of thirty and forty-five, whose arteries in the feet or legs cannot be palpated or in whom there is a definite diminution in pulse volume, and whose feet become blanched when elevated above the horizontal and suffused and dusky red or cyanotic in the dependent position, a diagnosis of thromboangiitis obliterans is indicated.

The etiology of this disease has not been definitely determined, but most of the writers feel that infection plays a part. Practically all agree that the use of tobacco, once the disease is established, aggravates the condition. Some believe it to be a casual agent. The pathology also is not thoroughly understood. There are several factors involved, some known and some

unknown. One is the decreased supply of arterial blood. The lumen of the arteries is restricted or occluded by thickening of the walls of the blood vessels, by thrombosis and by spasm. Thrombophlebitis frequently accompanies the arterial obstruction. There is also, according to many students of this condition, an increased viscosity of the blood, that favors thrombosis.

The treatment of thromboangiitis obliterans cannot be considered as standardized, but it has progressed very definitely in the past decade. There are at least six remedial measures that are available to all physicians.

1. Absolute prohibition of tobacco. Investigators are in unanimous agreement on this one point. It is as well to be brutally frank from the beginning by putting the choice between the loss of his feet and the continued use of tobacco squarely up to the patient.
2. Hygienic care of the feet. They should be guarded carefully against trauma and should be kept clean, warm and dry.
3. Passive exercise. This procedure is not only diagnostic, but is thought by many to be of real value in treatment. With the patient lying flat in bed or on a comfortable table, the affected limb is elevated to an angle of about 45 degrees for from one to two minutes. Then it is allowed to hang off the side of the bed for a like period before the horizontal position is resumed. These maneuvers should be repeated several times at each treatment period, and while they are in progress the limb should be kept warm. It is thought that draining the blood from the tissues, followed by the resultant engorgement accomplished by the dependent position, tends to establish a collateral circulation. The same goal is sought by many of the methods of treatment, among them intermittent constriction and release, pressure suction as by the pavex boot, and warm soak.
4. Therapeutic baths. Formerly the contrast bath alternating the hot and the cold bath, or douche, was widely used. Now there seems to be a rather pronounced change of opinion in favor of the warm soak with the foot immersed in a warm bath a little above body temperature for a period of not more than thirty minutes, followed by a rest period in horizontal position with the limb kept warm. This treatment should be repeated several times during a

twenty-four hour period. Intermittent compression and release of the venous circulation by means of a wide band, such as the cuff of a blood pressure apparatus, produces much the same effect.

5. Administration of foreign protein. An increase in body temperature and a corresponding dilatation of the peripheral blood vessels result.

6. Chemotherapy. Administration of drugs of the sulfanilamide group should from a theoretic standpoint appeal to those who believe this disease is due to infection. This form of treatment has, however, been tried out thoroughly at the Mayo Clinic with doubtful results. Intravenous injection of sodium citrate or hypertonic saline solution is another form of therapy. The intravenous administration of heparin is also advocated by some. Theis and Freeland² were of the opinion that sodium tetrathionate and sodium thiosulfate increase the oxygen carrying capacity of the blood, and some authors reported that a diet high in calcium and vitamins is beneficial.

The measures already mentioned are available to any physician, but probably the most scientific as well as the most practical way to insure a more normal blood supply to the extremities is by direct attack on the sympathetic ganglia, thus shutting off the spasmic impulses from the sympathetic nervous system. Such measures are better carried out by one skilled in neurosurgery or roentgen therapy; they embrace injection of novocain and then alcohol into the sympathetic ganglia. High voltage roentgen treatment over the ganglia implicated has many advocates, among them Pfahler, who believed this method of treatment comparable with sympathectomy. Finally, the surgical removal of the indicated group of sympathetic ganglia has been done in a large number of cases with great benefit.

Amputation was formerly resorted to more frequently, and often the patient was subjected to repeated amputation. DeTakats emphasized the necessity of careful selection of the level for amputation by ascertaining the level of temperature change. He advocated the injection of 0.1 cc. of histamine hydrochloride at the probable site of amputation. If the circulation at this level is sufficient to insure viable tissue, an intense hyperemia results from the histamine. Temperature changes afford a fair

estimate of the blood supply and they are obvious if both legs are left uncovered in a cool room for a short while. This author also stressed the importance of giving patients with this disease gas gangrene serum as prophylaxis against infection with the gas bacillus. There frequently appear small patches of gangrene on the toes, which are usually superficial. Even when this process extends to the whole of a distal phalanx and remains dry, conservative treatment frequently saves the limb. If the gangrenous process extends to the deeper structures, amputation must be considered, and it is here that one should lay aside conservatism and exercise good judgment in selecting the site for amputation. Every effort should be made, since the foot cannot be restored to its former usefulness, to give the patient a good stump. When it is necessary to amputate, it is important to choose a high enough level, and if the first flaps do not bleed freely reamputation should take place at once at a higher level.

SENILE LESIONS. When patients get beyond the fourth or fifth decade, one looks for senile changes in the presence of obstructive lesions. Also in this age group diabetes is more frequently a complicating factor, and there remains the possibility of spasm from the hyperactive sympathetic nervous system. The problem is not unlike that of cases of thromboangiitis obliterans. The chances for successful treatment, however, are not so good, and one must be sure that the patient is not a diabetic before deciding upon amputation. Should this measure be decided upon, it is important always to keep in mind the necessity of obtaining adequate blood supply for the flaps.

DIABETIC LESIONS. It is rare that the diabetic condition alone is at fault in diabetics with arterial deficiency. While perhaps more apt to go into coma, the young diabetic rarely suffers from occlusion of the blood vessels. As the diabetic advances toward middle age, changes incident to this period accompany the endarteritis of diabetes. Always there is also the possible factor of spasm, which further constricts an already decreased arterial lumen. Then, too, the diabetic, being notoriously susceptible to infection, is frequently the victim of septic thrombi and emboli, which may easily plug the already inadequate lumen of the vessels.

OCCCLUSION BY THROMBI OR EMBOLI. The occlusive lesions that occasionally occur suddenly are by far the most dramatic of the accidents to the peripheral blood vessels. Theories as to causation are more numerous than cases. A few of the more plausible are septic emboli, dislodged venous thrombi that gain entrance to the arterial circulation through the patent foramen ovale, irregular heart rhythm, retarded circulation of the blood in debilitated patients following surgery especially, trauma and increased viscosity of the blood.

Whatever the cause, the physician is but rarely placed in a position that so severely taxes his ability. The most prominent symptom is pain, which usually, but not always, is sudden and may be agonizing. There may be shock, varying with the extent of the arterial tree involved. The limb is usually pulseless, pallid and cold.

McKechni and Allen,³ reviewing 100 cases of sudden arterial occlusion at the Mayo Clinic, warned against too great dependence on classical symptoms. They reported that the incidence of correct diagnosis closely paralleled the physician's suspicion as to the character of the case in their series, and that in only about half of the cases was the pain of sudden onset. They stressed the need for prompt diagnosis and treatment as irreparable damage occurs quickly. They advised the use of the suction pressure apparatus and the administration of $\frac{1}{2}$ grain of papaverine hypodermically at hourly intervals according to reaction. If surgical removal of the embolus is to be attempted, it should be done early as damage to the wall of the obstructed blood vessel soon takes place. The embolus is likely to be found just proximal to the point where pulsation ceases. A frequent site of lodgment is at a bifurcation of the artery. There does not seem to be as much enthusiasm for this procedure as there was a few years ago. Conservative measures now appear to offer about as good a chance for relief. Ligation of the accompanying vein would seem to be a logical procedure in preventing gangrene, but it requires prompt intervention as gangrene occurs quickly when the main arterial supply is suddenly cut off.

RAYNAUD'S DISEASE. In contrast to thromboangiitis obliterans, Raynaud's disease occurs far more frequently in women than in men. It is more apt to attack the hands than the lower

extremities and is essentially a condition of arterial spasm. As there is usually no organic change in the arteries, in the milder cases serious changes are less apt to take place in the nutrition of the parts affected. During the attack, the area involved becomes blanched and cold. When this phase ceases or is relieved, there is a period of engorgement, followed by a return to normal. The manifestations of this disease are frequently bilateral and symmetric. In the severe forms gangrene may occur, and while the extremities, especially the hands, are most frequently affected, any area may suffer, even the viscera. It is the disease that exemplifies to extreme degree the dominance of vasomotor control of the circulation.

Allen found arsenic in the urine of 7 patients with this disorder and treated them with great benefit by administering sodium thiosulphate intravenously two or three times weekly. The milder cases give very little trouble if the affected area is protected from cold. The warm soak usually gives relief. In severe cases with gangrene threatened, direct attack on the sympathetic ganglia would seem to be the logical treatment.

THROMBOPHLEBITIS. This disease probably occurs more frequently than any of the other obstructive lesions of the blood vessels. Its etiology, like that of the other obstructive lesions, is not thoroughly understood. Probably the most plausible of the possible causes are infection, retarded circulation or increased viscosity of the blood, and trauma.

The diagnosis is usually easily made, but in atypical cases it may be difficult. The occasional observance of a temporary spasm of the accompanying artery would be confusing but for the temporary character of the arterial incompetency. Allen observed that there is very little danger of embolism after a diagnosis of thrombophlebitis has been made. In only 5 of 116 consecutive cases of postoperative embolism reported by this author was a diagnosis of thrombophlebitis made.

The treatment generally employed is immobilization and application of warm moist dressings in the acute stage and elastic support and controlled exercise during the period of convalescence. Some advise surgery, either ligation of the vein above the thrombus or removal of the thrombosed portion. The administration of some one of the drugs of the sulfanila-

mide group might be beneficial, especially in cases of frank sepsis. Hypertonic saline solution, sodium citrate and heparin all have their advocates.

COMMENT

The object of this paper has been to present a bird's eye view of the various obstructive lesions of the peripheral blood vessels. Only the salient features of types occurring commonly have been discussed.

BIBLIOGRAPHY

1. Ochsner, A., and DeBakey, M.: Rational Consideration of Peripheral Vascular Disease Based on Physiologic Principles, J.A.M.A. **112**: 230-236 (Jan. 21) 1939.
2. Theis, F. V., and Freeland, M. R.: Thromboangiitis Obliterans: Treatment with Sodium Tetrathionate and Sodium Thiosulfate, Arch. Surg. **40**: 190-207 (Feb.) 1940.
3. McKechnie, R. E., and Allen, E. V.: Sudden Occlusion of Arteries of Extremities; Study of 100 Cases of Embolism and Thrombosis, Surg., Gynec. & Obst. **63**: 231-240 (Aug.) 1936.

525 *E. Duval St.*

THE USE OF SOLUTION OF POSTERIOR PITUITARY EXTRACT IN NORMAL LABOR

Claude B. Wright, M. D.
St. Petersburg

The consensus among obstetric specialists is that the use of solution of posterior pituitary extract in the early stages of labor is hazardous, and not sound obstetrics. In this paper the dangers attendant upon the use of this drug are discussed.

Solution of posterior pituitary extract is a powerful preparation which has a specific action on smooth muscle fibers, causing them to contract violently and rapidly. The extract is derived from the posterior lobe of the pituitary gland of cattle. The gland is cleaned, dried, and powdered, and then put into sterile solution for hypodermic use. The books on materia medica state that the average dose is 1 cc. This product has many uses because of its action on smooth muscle, but is used chiefly in obstetrics. It is a valuable drug if used when indicated and in proper doses. After the third stage of labor is completed, it has its greatest and safest use. At this time rapid contraction of the uterus is desirable to prevent hemorrhage.

The use of pituitrin in the first stage of labor

is fraught with danger because at this time the cervix uteri is not dilated and, therefore, the birth canal is obstructed. In this circumstance pituitrin increases the contraction of the uterus and may cause it to rupture. It may also cause premature separation of the placenta and in some instances death of the baby because of increased pressure on the fetal head. The uterus of the pregnant woman is extremely sensitive to even very small doses of pituitrin. In the first stage of labor the smooth muscle of the uterus is hypersensitive to the stimulation of pituitrin. Because of the dangers attendant, it is unwise to use this product at this time.

In cases of primary uterine inertia if pituitrin is resorted to, it should not be administered in doses exceeding $\frac{1}{2}$ to 1 minim, and not more than two doses can be safely given. It is much better and safer not to use it at all, but to wait until the uterine pains become more severe and more regular of their own accord. It is more rational to allow a woman with primary uterine inertia to rest rather than to try to stimulate the pains of labor with pituitrin. I have never observed a case of this type in which there was no obstruction to normal delivery that did not respond to rest and patience. Patience and time are better physicians in this instance than drugs. I know of nothing that can be more trying than waiting in one of these cases for effective labor to begin. Nevertheless, if there is no condition present which forces one to hurry labor, it is far better judgment to wait for it to become effective of its own accord. The patient should be allowed to rest. The fetal heart should be examined at frequent intervals and the general condition of both the mother and fetus should be guarded. It is my opinion after much reading on this subject that the consensus among the leading obstetricians is that pituitrin has no safe place in the first stage of labor.

The second stage presents an entirely different picture. Here the cervix uteri is fully dilated. Providing there is no obstruction in the birth canal nor any disproportion between the size of the fetal head and the canal, pituitrin may be used in small doses with a much greater degree of safety. If labor is progressing normally, pituitrin should not be used even now. If secondary uterine inertia develops at this time, and if the head is at the level of the

ischiatric spines and there is no obstruction, then a small dose of pituitrin may be given with relative safety. If, however, labor progresses slowly and steadily, it is better judgment not to use pituitrin at all. It is far safer to apply low forceps and do an episiotomy, if indicated.

In the third stage of labor pituitrin is of greatest use. It is not advisable, however, to administer it until the membranes and placenta have been delivered because of the danger of a contracting cervix uteri catching the separating placenta. If this occurs, it is necessary to pull the placenta through, causing trauma and running the risk of retained portions of the secundines. It may even be necessary to resort to manual removal of after-birth tissues. In this instance both the resulting trauma and the danger of introducing infection into the uterus are to be considered. It is better practice, therefore, not to give pituitrin until the third stage of labor is completed. It should then be given to insure prompt contraction of the uterine musculature, thus avoiding uterine hemorrhage.

The action of pituitrin is positive and fast, but rather short in duration. If the patient has exhibited any signs of toxemia during the concluding month of the pregnancy, such as hypertension, edema of the extremities, headache and albuminuria, it is better not to give the drug at all because of its pressor action resulting in elevation of the blood pressure. It can readily be seen that this action might initiate convulsions in the recently delivered woman. In that event the use of ergot or some ergot preparation is preferable.

It appears then that the use of pituitrin in labor is limited to those cases having well defined indications for its use. DeLee in a recent article stated:

The harmful action of solution of posterior pituitary is thus clear. Solution of posterior pituitary (1) strengthens the uterine power and prolongs its action, (2) shortens the diastolic rest periods and (3) increases the intra-uterine tension by raising the tonus of the muscle—in short, solution of posterior pituitary makes normal pains pathologic and exaggerates all their evil effects on both mother and baby.

There is no convincing physiologic, experimental or clinical evidence to prove that thymophysin, thyuitary, pituthymin and like proprietary preparations are anything more than diluted solution of posterior pituitary extract, or the drug in another guise. Propaganda dispensed by representatives of the various drug

houses as to the harmlessness of their particular preparations is therefore not to be accepted by the profession. Only one of these products was submitted to the Council on Pharmacy and Chemistry of the American Medical Association, and it was not approved, as the claims made for it were not substantiated.

SUMMARY

(1) The use of solution of posterior pituitary extract is not indicated in the first stage of labor. If it is used at all, it should not be given in more than $\frac{1}{2}$ to 1 minim doses, and then the effect of the drug should be watched as if it were dynamite.

(2) In the second stage of labor this preparation should be used only with great caution. In cases of secondary uterine inertia with the head on the perineum, it is better to use low forceps and episiotomy, if indicated, than to use pituitrin. In this way deep tears of the cervix and perineum are avoided.

(3) After the third stage of labor is complete, pituitrin may be used safely and is of great value at this time. If, however, there is evidence suggesting a late toxemia of pregnancy, it should not be used.

(4) Various proprietaries such as thymophysin, thyuitary, pituthymin and combinations with quinine are not to be recommended.

CONCLUSION

Solution of posterior pituitary extract is a valuable drug if used when indicated. By the same token it is an extremely dangerous drug when used carelessly. I have attempted in this paper to outline the dangers attendant upon its indiscriminate use in labor, and I hope that this short discussion has been of value in pointing out the dangers present in its careless use.

214 Equitable Bldg.

SCIENTIFIC PROGRAM, 1942

Have you conducted original research or experimental work? Do you wish to report your findings to the State Convention in April, 1942? If so, make application at once for a place on the program to Dr. Herbert E. White, Chairman of the Committee on Scientific Work, Box 1018, Jacksonville. Dr. White has announced that no general letter calling for papers will be mailed to the membership this year.

Florida Medical Association, Inc.

Officers and Committees

OFFICERS

WALTER C. JONES, M.D., President *Miami*
GILBERT S. OSINCUP, M.D., President-Elect *Orlando*
LUTHER W. HOLLOWAY, M.D., 1st Vice-Pres. *Jacksonville*
FREDERICK K. HERPEL, M.D., 2nd Vice-Pres. *W. Palm Beach*
WALTER C. PAYNE, M.D., 3rd Vice-Pres. *Pensacola*
SHALER RICHARDSON, M.D., Sec'y-Treas. *Jacksonville*

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H. *Jacksonville*

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., Chairman, "C," '44 *Jacksonville*
J. ROCHER CHAPPELL, M.D., "E," '43 *Orlando*
GEORGE L. COOK, M.D., "D," '42 *Tampa*
FREDERICK K. HERPEL, M.D., "F," '43 *West Palm Beach*
WALTER C. PAYNE, M.D., "A," '44 *Pensacola*
WILLIAM C. THOMAS, M.D., "B," '42 *Gainesville*
WALTER C. JONES, M.D. *Miami*
SHALER RICHARDSON, M.D. *Jacksonville*
STEWART G. THOMPSON, D.P.H. (Advisory) *Jacksonville*

SCIENTIFIC WORK

H. E. WHITE, M.D., Chairman, "C," '43 *St. Augustine*
LELAND F. CARLTON, M.D., "D," '42 *Tampa*
CHARLES J. COLLINS, M.D., "E," '43 *Orlando*
ROBERT B. HARKNESS, M.D., "B," '42 *Lake City*
HOMER L. PEARSON, M.D., "F," '44 *Miami*
JAMES H. POUND, M.D., "A," '44 *Tallahassee*

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAICK, M.D., Chairman, "C," '43 *Jacksonville*
LAURIE J. ARNOLD, JR., M.D., "B," '44 *Lake City*
HORACE A. DAY, M.D., "E," '44 *Orlando*
WHITMAN C. MCCONNELL, M.D., "D," '42 *St. Petersburg*
BRUCEY M. RHODES, M.D., "A," '42 *Tallahassee*
JOSEPH S. STEWART, M.D., "F," '43 *Miami*

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., Chairman, "D," '42 *Tampa*
REDDIN BRITT, M.D., "C," '42 *St. Augustine*
ROBERT D. FERGUSON, M.D., "B," '43 *Ocala*
J. N. McLANE, M.D., "A," '44 *Pensacola*
CAYETANO PANETTIÈRE, M.D., "F," '44 *Miami*
WALTER A. WEOO, M.D., "E," '43 *Lakeland*

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., Chairman, "C," '42 *Daytona Beach*
WILBUR L. ASHTON, M.D., "E," '42 *Jacksonville*
SIDNEY G. KENNEDY, M.D., "A," '43 *Pensacola*
BAILEY B. SORY, JR., M.D., "F," '44 *Palm Beach*
JAMES L. STRANGE, M.D., "B," '44 *McIntosh*
HARPER E. WHITAKER, M.D., "D," '43 *Tampa*

NECROLOGY

HUBERT A. BARGE, M.D., Chairman, "F," '42 *Miami*
HAYNSWORTH D. CLARK, M.D., "E," '42 *Ft. Pierce*
AUGUSTUS E. CONTER, M.D., "A," '43 *Apalachicola*
GEORGE R. CREEKMORE, M.D., "B," '43 *Brooksville*
JULIAN L. HARGROVE, M.D., "D," '44 *Bartow*
ARTHUR J. LOGIE, M.D., "C," '44 *Jacksonville*

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chairman, "C," '42 *Jacksonville*
HERBERT L. BRYANS, M.D., "A," '43 *Pensacola*
W. WELLINGTON GEORGE, M.D., "F," '43 *West Palm Beach*
FRANK D. GRAY, M.D., "E," '44 *Orlando*
DAVID R. MURPHEY, JR., M.D., "D," '44 *Tampa*
GEORGE C. TILLMAN, M.D., "B," '42 *Gainesville*

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chairman, "F," '44 *Miami*
JAMES M. HOFFMAN, M.D., "A," '42 *Pensacola*
HEWITT JOHNSTON, M.D., "E," '43 *Orlando*
J. N. MOORE, M.D., "B," '44 *Ocala*
R. W. S. OWEN, M.D., "D," '43 *St. Petersburg*
HARRY A. PEYTON, M.D., "C," '42 *Jacksonville*

MEDICAL ECONOMICS

H. A. WALKER, M.D., Chairman, "F," '44 *Miami Beach*
EDWIN H. ANDREWS, M.D., "B," '44 *Gainesville*
ROBERT P. HENDERSON, M.D., "E," '43 *Orlando*
EDWARD JELKS, M.D., "C," '42 *Jacksonville*
JOSEPH W. TAYLOR, M.D., "D," '42 *Tampa*
COURTLAND D. WHITAKER, M.D., "A," '43 *Marianna*

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chairman, "C," '42 *Jacksonville*
ELMO D. FRENCH, M.D., "F," '44 *Miami*
ALVIN L. MILLS, M.D., "D," '44 *St. Petersburg*
LOUIS M. ORR, II, M.D., "E," '42 *Orlando*
JOHN H. THOMAS, M.D., "B," '43 *Gainesville*
JOE I. TURBERVILLE, M.D., "A," '43 *Century*

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chairman, "F," '44 .. *Ft. Lauderdale*
ISAAC M. HAY, M.D., "E," '42 *Melbourne*
JOHN E. MAINES, JR., M.D., "B," '44 *Gainesville*
GEORGE C. OVERSTREET, M.D., "D," '42 *Lakeland*
EDWIN C. SWIFT, M.D., "C," '43 *Jacksonville*
RUFUS THAMES, M.D., "A," '43 *Milton*

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., Chairman, "F," '42 *Miami*
WILLIAM C. BLAKE, M.D., "D," '42 *Tampa*
J. MAXEY DELL, JR., M.D., "B," '44 *Gainesville*
DUNCAN T. MCEWAN, M.D., "E," '43 *Orlando*
ROBERT G. NOBLES, M.D., "A," '44 *Pensacola*
LUDO VON MEYSENBUG, M.D., "C," '43 *Daytona Beach*

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., Chairman, "E," '44 .. *Orlando*
HARRY S. HOWELL, M.D., "B," '43 *Lake City*
PAUL KELLS, M.D., "F," '43 *Miami*
ERNEST B. MILAM, M.D., "C," '42 *Jacksonville*
WILLIAM D. ROGERS, M.D., "A," '44 *Chattahoochee*
WILLIAM M. ROWLETT, M.D., "D," '42 *Tampa*

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., Chairman, "F," '42 *W. P. Beh.*
LAURIE L. DOZIER, M.D., "A," '44 *Tallahassee*
I. M. HAY, M.D., "E," '43 *Melbourne*
W. WARDLAW JONES, M.D., "B," '44 *Dade City*
ROBERT G. NELSON, M.D., "D," '42 *Tampa*
FERDINAND RICHARDS, M.D., "C," '43 *Jacksonville*

CHILD HEALTH

W. W. QUILLIAN, M.D., Chairman, "F," '44 .. *Coral Gables*
THOMAS M. PALMER, M.D., "C," '43 *Jacksonville*
EUGENE C. PEEK, M.D., "B," '42 *Ocala*
COUNCILL C. RUDOLPH, M.D., "D," '42 *St. Petersburg*
WILLIAM E. SINCLAIR, M.D., "E," '44 *Orlando*
ALVYN W. WHITE, M.D., "A," '43 *Pensacola*

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., Chairman, "C," '42 *Jacksonville*
JAMES L. CHALKER, M.D., "B," '42 *Ocala*
LUTHER C. FISHER, JR., M.D., "A," '43 *Pensacola*
JOHN D. HAGOOD, M.D., "D," '43 *Clearwater*
LAWRENCE C. INGRAM, M.D., "E," '44 *Orlando*
ARTHUR L. WALTERS, M.D., "F," '44 *Miami Beach*

COUNCILOR DISTRICTS AND COUNCILORS

Twelfth—W. DUNCAN OWENS, M.D., Chmn., '43 *Miami Bch.*
First—WILLIAM C. ROBERTS, M.D., '42 *Panama City*
Second—C. D. WHITAKER, M.D., '43 *Marianna*
Third—EUGENE G. PEEK, M.D., '43 *Ocala*
Fourth—ALVA T. COBB, M.D., '42 *Gainesville*
Fifth—LUCIEN Y. DYRENFORTH, M.D., '43 *Jacksonville*
Sixth—MAXIMILIAN STERN, M.D., '42 *Daytona Beach*
Seventh—JOHN R. BOLING, M.D., '43 *Tampa*
Eighth—HOWARD V. WEEMS, M.D., '42 *Sebring*
Ninth—CARL D. HOFFMANN, M.D., '42 *Orlando*
Tenth—E. B. HARDEE, M.D., '43 *Vero Beach*
Eleventh—ROBERT L. ELLISTON, M.D., '42 .. *Ft. Lauderdale*

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., Chairman, "A," '43 *Quincy*
THOMAS H. BATES, M.D., "B," '43 *Lake City*
R. RENFRO DUKE, M.D., "D," '44 *Tampa*
WILLIAM S. MANNING, M.D., "C," '42 *Jacksonville*
RICHARD H. WALKER, JR., M.D., "E," '44 *Orlando*
ARTHUR H. WEILAND, M.D., "F," '42 *Coral Gables*

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman *Jacksonville*
WALTER C. JONES, M.D. *Miami*
SHALER RICHARDSON, M.D. *Jacksonville*
JAMES E. PAULLIN, M.D. (A.M.A. ex-officio) *Atlanta*

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate *Jacksonville*
HERBERT L. BRYANS, M.D., Alternate *Pensacola*
(Terms expire Dec. 31, 1942)

MEREDITH MALLORY, M.D., Delegate *Orlando*
GEORGE M. DAWSON, M.D., Alternate *West Palm Beach*
(Terms expire Dec. 31, 1943)

Committees—Continued on next page

Committees — Continued**GENERAL ADVISORY BOARD OF
PAST PRESIDENTS**

WILLIAM E. ROSS, M.D., Chairman, 1919	.....	Jacksonville
W. HENRY SPIERS, M.D., Secretary, 1938	.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902	.....	Pensacola
HENRY E. PALMER, M.D., 1909	.....	Tallahassee
ROBERT H. MCGINNIS, M.D., 1915	.....	Jacksonville
RALPH N. GREENE, M.D., 1917	.....	Coral Gables
FREDERICK J. WALTER, M.D., 1918	.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920	.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923	.....	Jacksonville
JOHN C. VINSON, M.D., 1924	.....	Tampa
JOHN S. McEWAN, M.D., 1925	.....	Orlando
H. MASON SMITH, M.D., 1926	.....	Tampa
JOHN A. SIMMONS, M.D., 1927	.....	Arcadia
FREDERICK J. WAAS, M.D., 1928	.....	Jacksonville
HENRY C. DOZIER, M.D., 1929	.....	Ocala
JULIUS C. DAVIS, M.D., 1930	.....	Quincy
GERRY R. HOLDEN, M.D., 1932	.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933	.....	Tampa
HOMER L. PEARSON, M.D., 1934	.....	Miami
HERBERT L. BRYANS, M.D., 1935	.....	Pensacola
ORION O. FEASTER, M.D., 1936	.....	St. Petersburg
EDWARD JELKS, M.D., 1937	.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939	.....	Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940	.....	Century

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in
Section 1103, Act of Congress of October 3, 1917;
authorized October 16, 1918Published monthly at Jacksonville, Florida. Price \$3.00 a year.
Single numbers, 30 centsThis Journal is not responsible for the opinions and statements
of its contributorsAddress Journal of the Florida Medical Association, Inc., Box 1018
Jacksonville, Fla. Telephone 5-0577**EDITOR**

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.	.....	Orlando
FRANK C. METZGER, M.D.	.....	Tampa
HOMER L. PEARSON, M.D.	.....	Miami
J. H. POUND, M.D.	.....	Tallahassee
W. McL. SHAW, M.D.	.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., Chairman	.....	Miami
SHALER RICHARDSON, M.D.	.....	Jacksonville
HERMAN WATSON, M.D.	.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman	.....	Jacksonville
THEODORE F. HAHN, M.D.	.....	DeLand
COUNCIL C. RUDOLPH, M.D.	.....	St. Petersburg

FLORIDA LEGISLATURE

A number of bills passed by the 1941 session of the Florida Legislature affect public health and are, therefore, of particular interest to the readers of the Journal. The official Senate or House number of each of these bills, together with the enacting clause or a brief synopsis, is given below; the entire text, we have been informed, will be available in printed form some time in August. The bill number and synopsis reproduced here will be an aid in locating any of the laws in question. Most attorneys will have on file the laws of

1941 after they are released by the Secretary of State.

Those new laws which particularly concern the practice of medicine will be included in full in the 1942 issue of the Florida Medical Directory, a copy of which will be mailed to each member of the State Medical Association.

MEDICAL EXAMINERS' BOARD

H. B. No. 1230; an act to amend Section 3 of Chapter 8415, Laws of Florida, Acts of 1921, the same relating to the appointment of members of the State Board of Medical Examiners of the State of Florida by the governor. The amendment omits the wording that required a ratio of allopaths, eclectics and homeopaths. The old section provided for 5 members of the Board to be allopathic physicians, 3 to be eclectic physicians and 2 to be homeopathic physicians. The law as amended makes no provision for a ratio of allopaths, eclectics and homeopaths.

WORKMEN'S COMPENSATION

H. B. No. 659; an act to amend and clarify the Florida Workmen's Compensation Act.

CANNABIS

S. B. No. 340; an act amending Sub-section 13 of Section 1 of Chapter 16087, Laws of Florida, Acts of 1933, regulating the manufacture, sale, possession, control, cultivation, etc., of narcotic drugs and hereby to amend the definition of "Cannabis" or products of the plant sometimes known as marijuana.

NEWBORN BABIES' EYES

S. B. No. 343; an act relating to the public health and for the protection of newborn babies' eyes and requiring doctors and midwives to use an effective solution of silver nitrate in newborn babies' eyes; to require at least one of the registered practicing physicians who has sponsored the application of any person to practice midwifery to instruct such person in the use of such silver nitrate solution, and to provide that the failure of either a doctor or midwife to use such solution of silver nitrate in newborn babies' eyes shall be cause for the revocation of such person's license to practice medicine or midwifery; and to provide that if any person now licensed to practice midwifery does not furnish a certificate from one of the physicians sponsoring her application for license within 60 days after this Act becomes a law, the State Board of Health shall revoke the license to such person to practice midwifery; and providing further that any person who shall hereafter make application for a license to practice midwifery shall furnish a certificate showing that such person has been instructed in the use of silver nitrate solution in the eyes of newborn babies.

INSURANCE

S. B. No. 448; an act authorizing and permitting each and every county, governmental unit, department, board or bureau of the State of Florida, to provide for life, health, accident, hospitalization or annuity insurance, or all or any kinds of such insurance for its employees, upon a group insurance plan, to enter into agreements with insurance companies to provide such insurance; to deduct periodically from the wages of any employee upon written request of such employee any premium or portion of premium for such insurance.

H. B. No. 794; an act authorizing the several boards of public instruction in counties having a population of not less than 200,000 of the State of

Florida to enter into agreements for group insurance for the teachers and other persons necessary to the operation of the public schools of their respective counties, and providing for contribution by said boards of public instruction to the premiums, and providing for the said boards to enter into such agreements and to do and perform all things necessary in carrying out such a plan of group insurance only when a majority of the teachers and other persons necessary to the operation of the public schools of such county may vote in favor of such a plan.

HOSPITALS

S. B. No. 497; an act to enable all counties of the State of Florida to establish and maintain public hospitals, levy a tax and issue bonds therefor, for construction and maintenance of such hospitals, maintain a training school for nurses, provide suitable means for the care of such hospitals and disabled persons, and providing for the appointment of trustees for such hospitals.

H. B. No. 717; an act relating to the examination and commitment of persons to the Florida State Hospital; requiring financial investigation of the person so committed; providing for a physical examination of said alleged insane person; fixing restrictions on entrants into the Florida State Hospital and repealing all laws and parts of laws in conflict herewith.

H. B. No. 449; an act providing for the incorporation, licensing and regulation of corporations not for profit for the purpose of operating non-profit hospital service plans by any hospital located in Duval County, Florida, exempting such corporations from all other provisions of the insurance laws of the State of Florida, providing penalties for the violations of the provisions of this act, and repealing all laws in conflict therewith.

H. B. No. 1701; an act authorizing any or all of the cities, towns or other governmental taxing units in Orange County, Florida, to enter into agreements with any Florida non-profit corporation organized for the purpose, for the aid, care, maintenance, treatment or hospitalization of the indigent citizens of such city, town or other governmental taxing unit.

H. B. No. 1699; an act authorizing and providing for the creation of the Orange County Hospital Board; defining the powers, duties and authority of said Board; authorizing said Board to issue evidences of indebtedness; authorizing said Board to acquire, own, control, manage, mortgage, lease or dispose of real and personal property; providing that said Board shall function as a body corporate; providing that said Board may enter into agreements with any governmental or taxing unit in Orange County, Florida, including the county itself for the rendering of aid, care, maintenance, treatment, support or hospitalization of indigent citizens of such governmental or taxing unit.

H. B. No. 1337; an act authorizing and empowering the Board of County Commissioners of Clay County, Florida, to levy a special tax of not to exceed two mills annually for hospitalization of indigent inhabitants of said county.

H. B. No. 1785; an act to provide for the creation of an emergency hospitalization fund in Gilchrist County, Florida; to provide for the administration of such emergency hospitalization fund; to provide that a portion of the revenue accruing to Gilchrist County, Florida, under authority of Chapter 14832, Laws of Florida, Acts of 1931, and acts amendatory thereof, be deposited in the emergency hospitalization fund; and to provide that such emergency hospitalization fund in no way affect the county health unit of Gilchrist County, Florida.

S. B. No. 690; an act to amend Chapter 19901 of the Laws of Florida of 1939, which is an act creat-

ing a Jackson County Hospital District and a Jackson County Hospital Corporation and provides for the establishment and operation of a public hospital at Marianna in Jackson County, by providing who may practice medicine and surgery and other healing arts in said hospital.

H. B. No. 1655; an act authorizing and empowering the Board of County Commissioners of Seminole County, Florida, to levy and assess, each year beginning with the year A. D. 1941, a special tax annually not to exceed five mills on the dollar on all real and personal property in Seminole County, Florida, subject to taxation for the purpose of creating a fund to be known as the "County Welfare Fund," and for the raising of funds for the care of the poor, indigent, and for medical and hospital treatment for the county poor, and for general social welfare work in Seminole County, Florida, and authorizing said Board to purchase any and all machinery and materials necessary to carry forward W. P. A. relief programs, and declaring the levying of said tax, and the expenditures there-of to be for a county purpose.

S. B. No. 597; an act to validate and confirm all acts and proceedings relative to the calling, holding, conducting and canvassing the returns of an election held in the County of Nassau, Florida, on November 5, 1940, on the question of levying an annual tax for establishing and maintaining a public hospital at Fernandina in Nassau County, and issuing bonds in the amount of \$60,000 for the purpose of purchasing a site and constructing said hospital; to validate and confirm all acts and proceedings relative to the appointment and organization of a board of hospital trustees for said county and all acts and proceedings of said trustees; to validate all proceedings of the board of county commissioners relative to the authorization of \$60,000 of hospital bonds approved at said election, to authorize and provide for the issuance and sale of said bonds and the levy and collection of said tax; to authorize and provide for the acquisition of a site for said hospital and the construction, management and operation thereof, and further relating to the powers and duties of the board of county commissioners and the board of hospital trustees with respect thereto.

S. B. No. 360; an act authorizing the city of Tallahassee to acquire, furnish, equip, operate and maintain a building or buildings suitable as a public municipal hospital, authorizing the issuance of certificates of indebtedness to pay therefor, authorizing the city to do all things necessary or incidental to the acquisition and operation of such hospital and the issuance of such certificates of indebtedness, providing for the payment of such certificates solely from the net revenues to be derived from the operation of said hospital or from revenues to be derived by the city from the operation of the electric distribution system or the gas plant or the water system of the city, or from all three of such utility systems and said hospital, authorizing the refunding of certain outstanding certificates of indebtedness, and providing remedies in the event of a default by the city.

DENTISTRY

S. B. No. 92; entitled an act to define and to regulate the practice of dentistry and dental hygiene in the State of Florida and to provide penalties for the violation of any of the provisions of this act. Nothing in this act is applied to the practice of his profession by a physician or surgeon licensed as such under the laws of this state unless he or she practices dentistry as a specialty. The Board shall be composed of five members who shall be appointed by the Governor of the State of Florida. The Florida State Dental Society may recommend from its membership not more than two nominees for each vacancy that exists and certify their recom-

recommendations to the Governor who may make his appointments therefrom. No person shall be appointed to the Board who is not a qualified voter under the laws of the State of Florida and who has not engaged in the practice of dentistry in the State of Florida for at least five years next preceding his appointment. Any person receiving a license from the Board, whether or not intending to engage immediately in the practice of dentistry in this state, shall cause his or her license certificate to be recorded in the office of the Clerk of the Circuit Court in one of the counties of this state and notify the secretary-treasurer of the Board of such recordation within sixty days of the issuance of the license certificate. Failure so to record said license certificate and to notify said secretary-treasurer within such time shall automatically revoke the said license and license certificate and they shall be null and void. Every dentist licensed to practice dentistry in this state is required by the Act to transmit certain information to the secretary-treasurer of the Board annually, together with a fee of \$6.00, and receive therefor an annual renewal certificate authorizing him or her to continue the practice of dentistry in this state for a period of one year. Any license and license certificate previously granted under the authority of this or any prior Dental Practice Act shall automatically be cancelled and annulled if the holder thereof fails to secure the renewal certificate within a period of three months after the 30th day of September of each year. Dentists shall be permitted to insert a professional card in the local press and programs and yearbooks but such cards shall not be greater in size than 3½ inches by 2 inches in depth and must not include more than the dentist's name, title, degree, office location, telephone number and office hours, and residence address and telephone number if desired.

VETERINARY

H. B. No. 81; an act to create a State Board of Veterinary Examiners, to prescribe its powers and duties, to prescribe the qualification of the membership thereof, their compensation and term of office and providing for the giving of bond by the Treasurer thereof for the faithful performance of his duty; to define the practice of veterinary medicine and surgery in Florida; to vest in said Board the authority to examine diplomas and credentials and affidavits of applicants and to hold examinations for applicants; to issue and revoke licenses to practice veterinary medicine and surgery.

PHARMACY

H. B. No. 145; an act to amend Section 1, Chapter 10201, Laws of Florida, Acts of 1925, the same being "An Act to amend Section 2212 of the Revised General Statutes of Florida, providing for examination by Board of Pharmacy and qualification of applicants," and the same being An Act entitled "An Act relating to the duties of the Board of Pharmacy of the State of Florida and the examination of pharmacists."

OSTEOPATHY

H. B. No. 923; an act relating to the practice of osteopathic medicine in the State of Florida; providing for the annual renewal of licenses with the State Board of Osteopathic Medical Examiners; providing for the conditions upon which renewal of licenses shall be issued and requirements prerequisite to the granting of such renewal licenses; providing for notice to be given licensees under said board of the provisions and requirements of this act; providing for the suspension of licenses to practice osteopathic medicine for the failure of any person to comply with the provisions of this act and to prescribe requirements for the restoration of licenses;

providing for compensation and expenses of members of said board and the officers thereof; providing for the disposition of the surplus of such renewal and restoration fees and limiting expenditures; specifically repealing Chapter 19066, Laws of Florida, 1929, which is an Act to require all persons licensed to practice Osteopathic Medicine in the State of Florida to renew annually their licenses with the State Board of Osteopathic Medical Examiners; providing requirements for issuance, notice, forfeiture for failure to comply therewith and restoration of licenses, and repeal all other laws in conflict herewith.

CHIROPRACTIC

H. B. No. 213; an act to require all persons licensed to practice chiropractic in the State of Florida to renew annually their licenses with the State Board of Chiropractic Examiners; to provide for the conditions upon which renewal of licenses shall be issued and requirements prerequisite to the granting of such renewal of licenses; to provide for notice to be given licensees under said Board of the provisions and requirements of this Act; to provide for the forfeiture of licenses to practice Chiropractic in the State of Florida.

S. B. No. 318; an act to amend Section 3 of Chapter 17764 of the Acts of 1937, the same being Section 12 of Chapter 9330, Laws of Florida, Acts of 1923, the same being Section 3446 of the Compiled General Laws of Florida for 1927; by redefining chiropractic; by adding additional regulations for applicants to practice chiropractic, and regulating their examination by the Florida State Board of Chiropractic Examiners, and providing that chiropractors may have the right to use the work of state, county and municipal laboratories, and by defining the scope of the practice of chiropractic and instruction and care of the sick.

COUNCIL FOR BLIND

H. B. No. 153; an act amending Section 18 of Chapter 18285, Creating a State Welfare Board, by adding thereto—To provide for the creation of the "Florida Council for the Blind," and the number and manner of appointment of the members of said council, to prescribe the qualifications of said members and to fix their powers and duties; making an appropriation to carry out the purposes and intent of said amendment.

STATE WELFARE

H. B. No. 941; an act applying only to counties which now have or may hereafter have a population of over 267,000 and regulating the caring for children away from their parents or guardians and including care for pregnant females and provision for infants by private persons and institutions in connection therewith. To provide that the State Welfare Board shall establish and administer reasonable rules and regulations, including minimum standards of care for such enterprises, and requiring those engaged in same to procure a license which shall be subject to revocation under certain conditions.

NURSES' DISTRICT

H. B. No. 746; an act creating a special tax district in Putnam County, Florida, to be known as the Putnam County Nurses' District; fixing and prescribing the boundaries of said district; providing for the governing and administration of the same; providing that the Board of Public Instruction of Putnam County, Florida, shall be the members of the Board of Trustees of the same; authorizing and empowering the said Board of Trustees to employ a county nurse; providing for the levy of taxes for the payment of salary, and expenses; and providing general powers and duties of said Board of Trustees.

BEAUTY CULTURE

S. B. No. 265; an act to amend sections of Chapter 16800, Laws of Florida, Acts of 1935, defining the practice of Beauty Culture, by defining the practice of beauty culture and requiring a license of Certificate of Registration as a condition precedent to any school teaching beauty culture or any person practicing beauty culture as beautician, manicurist, and pedicurist or acting as a junior operator beautician and prescribing the terms and conditions upon which licenses or certificates of registration may be issued to any person to practice beauty culture or act as a junior operator beautician or manicurist and pedicurist or operate a beauty culture school or teach in a beauty culture school in the State of Florida; creating the State Board of Beauty culture examiners and defining and declaring its powers and duties; regulating the teaching and practice of beauty culture or acting as a junior operator beautician or manicurist and pedicurist, by those licensed hereunder; regulating the operation of beauty schools, prescribing a course of study for such schools and the requirements for graduation therefrom; imposing certain fees upon persons applying for licenses or certificates of registration to practice beauty culture, act as a junior beautician or manicurist and pedicurist or teach beauty culture schools or operate a beauty culture school in this state.

BARBERS

S. B. No. 231; an act relating to the occupation of barbering and the operation of barber shops: authorizing the barbers' Sanitary Commission, upon petition signed by a 2-3 per cent of all of the Barbers holding Certificates of Registration in a County, to investigate trade practices among barbers and barber shops in such county and, after public hearings, to prescribe and enforce such reasonable rules and regulations pertaining to minimum prices to be charged for barber services and hours of operation of barber shops as will eliminate unfair and unsanitary practices.

COERCION OF HOSPITAL WORKERS CONDEMNED

Coercive technics used by labor organizations in hospital work are condemned as a threat not only to the health and life of patients but also to the high morals and standards which have been applied to the care of the sick since time immemorial by *The Journal of the American Medical Association* for June 21. An editorial on strikes in hospitals says:

Recently Pittsburgh and Allegheny County in Pennsylvania have been subjected to an extraordinary manifestation in medical affairs: a strike among hospital workers associated with Local Union No. 255 of the State, County and Municipal Workers of America, affiliated with the Congress of Industrial Organizations. Activities included picketing, demonstrations, interference with the removal of patients who wanted to use taxicabs, and interference with the receipt of food and the removal of garbage. In a strike called at the West Penn Hospital on April 18, maids, orderlies and employees in the nurses' home, in the engineering division and in the garages were called out; there were threats of violence, actual violence and establishing of picket lines. The window of an ambulance leaving the hospital was smashed and, altogether, a serious situation was created affecting the lives and health of all the patients in the hospital. On April 19 a court of Allegheny County granted an injunction restraining the defendant and its members from interfering with, hindering or obstructing the conduct and operation of the West Penn Hospital. Previously *The Journal* has referred to a decision by the

Supreme Court of the State of Pennsylvania, which said on Jan. 6, 1941:

"A hospital is not an industry. It has not been the custom in the past to unionize hospitals. The effect of unionization and attendant efforts to enforce demands would involve results far more sweeping and drastic than mere property rights.

"The questions of profits for the employer or wages for the employees are not alone involved. It is not merely a matter of suspending operations, ceasing work and stopping production, such as might be true in a steel mill or automobile factory. It is a question of protecting the health, safety and, in many cases, the very lives of those persons who need the service a hospital is organized to render."

Our government, through the President, has used the United States Army to put into operation an industry conceived to be necessary in the national defense emergency. The patients in a hospital are there in almost every instance because of conditions which constitute an emergency of another kind. Many of them are recovering from surgical operations; some of them are mothers who have given birth recently to children or who are about to give birth to children; some of them are little children who are being treated for serious conditions, including infectious diseases. The Supreme Court of the State of Pennsylvania was well advised when it said "a hospital is not an industry" and when it intimated that the use of the strike to enforce demands would involve "results far more sweeping and drastic than mere property rights." Recently a member in Congress arose to inquire why the violators of the law in the State of Pennsylvania were not prosecuted by the proper authorities of that state. Certainly here is a situation in which every power that the state possesses should be applied to protect the thousands of patients in the hospitals of Pittsburgh. Can it be that the state authorities are unwilling or incompetent to give these sick the protection that is their right?

Every one of the hospitals concerned is a nonprofit, public, charitable corporation. Not one of these hospitals is engaged in any trade or business, regardless of the point of view that has occasionally been expressed by some government officials. The concept that medicine is a trade and that the work of the hospital is a business is certain to lead to exactly the type of abuse which has developed in the state of Pennsylvania. Inevitably it will break down the morals and standards which have been applied to the care of the sick since time immemorial. In every religion held sacred by man the care of the sick is held to be a spiritual task. The type of savagery that permits leaders of labor to carry coercive technics into the work of the hospital may involve a responsibility that reaches high in the government not only of the state of Pennsylvania but also of the United States.

JUDGE PROCTOR IMPOSES SENTENCE

Following the trial of the U. S. Government versus the American Medical Association and other defendants on charges of violating the Sherman Anti-Trust Act and their conviction by a jury April 4, Justice James M. Proctor of the District Court in Washington, D. C., on May 29, imposed a fine of \$2,500 on the Association and a fine of \$1,500 on the Medical Society of the District of Columbia. The defense counsel announced that an appeal to the higher courts would be filed. The proceedings of the trial were published in various is-

sues of the Journal of the American Medical Association, beginning February 15.

Reprinted from Journal of the American Medical Association 116: 2604 (June 7) 1941.

A. M. A. MEETING

The American Medical Association adjourned its 92nd Annual Convention on June 6 after a five-day meeting during which the registration totaled 7,269. The Florida Medical Association was officially represented in the House of Delegates by Drs. Meredith Mallory of Orlando and Edward Jelks of Jacksonville; the total attendance from this State was 54.

Although the problems which confronted the House of Delegates were largely military, social and economic, those relating to scientific advancement were not overlooked. An action was taken whereby there is to be established a Committee on Pan American Relationships, which will be concerned with the establishment of scientific interchange with the medical societies of our South American, Mexican, Cuban, Puerto Rican and Canadian colleagues. It was announced that the annual session for 1942, to be held in Atlantic City, will be a Pan American session to which distinguished representatives of the other American nations will be asked to send representatives and exhibits.

The following members of our Association registered at the national meeting:

Bartow: C. H. Murphy. *Cocoa:* T. C. Kenaston. *Coral Gables:* Warren W. Quillian. *Dade City:* Stanley T. Simmons. *Daytona Beach:* Morris B. Seltzer. *Ft. Lauderdale:* E. C. Chamberlain, Frank Denniston. *Jacksonville:* Edward Jelks, J. G. Lyerly, J. Frank Wilson. *Miami:* I. H. Agos, Ralph F. Allen, W. J. Barge, John E. Burch, Frederick H. Dieterich, Winston F. Harrison, Claude G. Mentzer, John D. Milton, Frank R. Morrow, E. Sterling Nichol, Bascom H. Palmer, Max Pepper, Kenneth Phillips, Harold Rand, Ralph S. Sappenfield, Iva C. Youmans. *Miami Beach:* Marc V. Abrams, Herman Boughton, M. B. Marks, David A. Nathan, Julius R. Pearson. *Ocala:* Henry L. Harrell. *Orlando:* Spencer A. Folsom, Eugene L. Jewett, Meredith Mallory, Don C. Robertson, Joseph G. Seltzer. *Pensacola:* Herbert W. Virgin, Jr., William L. Williams. *St. Petersburg:* James A. Bradley, Charles E. Hebard, Robert J. Needles. *Sarasota:* John M. Butcher, Joseph Halton, J. Edward Harris, John J. Jares, Jr., A. Lamar Matthews. *Tampa:* J. C. Dickinson, Herbert R. Mills, J. C. Vinson. *Winter Haven:* Ivan W. Gessler. *Winter Park:* Elwyn Evans, Benjamin F. Hart, Ruth S. Hart.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. T. F. Hahn of DeLand announce the birth of a daughter, Jennifer, on April 29, 1941.

* * *

Dr. and Mrs. W. Wardlaw Jones of Dade City announce the birth of a daughter, Melinda Wynn, on June 11.

* * *

Dr. and Mrs. John F. Lovejoy of Jacksonville announce the birth of a daughter, Margaret McCabe, on June 24.

MARRIAGES

Dr. Edward R. Annis of Tallahassee and Miss Betty Starck of Miami were married on June 16, 1941.

DEATHS

Dr. S. H. Etheredge of Tampa died on June 10, 1941.

STATE NEWS ITEMS

Dr. Frank G. Slaughter of Jacksonville returned from New York early in July, where he closed negotiations for the publication of two more books. Dr. Slaughter signed a contract with his publishers for his second book, the tentative title of which is "Stepping Stones," and for an option on a third book. The first book published by this author was entitled "That None Should Die." It was the book of the month choice for May of the Book League of America, giving the volume circulation of some 50,000 copies. Dr. Slaughter's second book is scheduled to come off the press in the spring of 1942.

* * *

The following Florida doctors appeared on the program of the Southeastern Section of the American Congress of Physical Therapy in Chattanooga, May 25-27; Elliott M. Hendricks, Ft. Lauderdale; John B. Black, Jacksonville; Francis W. Glenn, Miami; Charles J. Heinberg, and J. J. McGuire, Pensacola; E. F. Carter, Tampa. Others attending the meeting were Drs. Kenneth Phillips, Miami, and A. R. Hollender, Miami Beach.

* * *

Dr. C. H. Kirkpatrick of Arcadia spent some time at the Mayo Clinic, Rochester, Minn., the early part of June.



GROWING COMFORTABLY ON S-M-A



Pretty soft life! Nothing to do but eat, sleep and grow in comfort on S-M-A. It's a happy, healthy first year for the S-M-A fed infant because S-M-A promotes normal, comfortable growth.

In addition to fat, carbohydrate and protein of physiological characteristics and proportions, each feeding of S-M-A provides standardized quantities of iron and vitamin A, B₁ and D. Only vitamin C need be supplemented.

Prescribing S-M-A makes life more pleasant for the doctor and the mother, too, because excellent results are obtained simply and quickly.

" " "

Normal infants relish S-M-A . . . digest it easily and thrive on it.

" " "

**FOR TREATMENT OF FOOD
ALLERGY DUE TO SENSITIVITY
TO MILK PROTEIN**
A Special Product

HYPO-ALLERGIC MILK

Hypo-Allergic Milk is thermally processed cows' whole milk in which the sensitizing properties of the protein are altered without affecting the caloric value of the protein or whole milk itself.

It may be used the same as cows' whole milk, as a beverage, or in infant feeding formulae where a sensitivity to milk protein is known to exist.

Complete information upon request.

*S-M-A, a trade mark of S.M.A. Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addition of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.



The Executive Committee of the Southeastern Surgical Congress has just announced that the next meeting of the Congress will be held in Atlanta, March 9 to 11, 1942, instead of in Jackson, Miss., as previously announced.

* * *

Drs. W. T. Simpson and W. E. Sherman of Winter Haven were the principal speakers at the Rotary Club meeting, June 12 in Winter Haven.

* * *

The following members of the Association were visitors at the headquarters' office during the month of June: Dr. W. M. Rowlett, Tampa; Dr. Leigh F. Robinson, Ft. Lauderdale; Dr. J. C. Davis, Quincy; Dr. Harrison A. Walker, Miami Beach; and Dr. Walter C. Jones of Miami.

* * *

The Annual Clinical meeting of the Florida Section of the Southeastern Surgical Congress will be held at the Orange County General Hospital in Orlando on Thursday, August 7.

The sessions will begin at 10 o'clock in the morning. The meeting will end promptly at 4 p. m. to enable the audience to attend the annual barbecue of the Orange County Medical Society.

Lunch will be served at 12:30 by the courtesy of the Orange County General Hospital.

An attractive program has been prepared, covering diagnosis of breast, stomach, urologic and colon conditions. These subjects will be handled from the standpoint of diagnosis rather than from that of operating technic. No set papers will be read. Clinical cases will be presented and discussed.

All members of the Florida Medical Association are cordially invited to attend.

* * *

The annual barbecue and picnic of the Orange County Medical Society will be held at the Dubsdread Country Club, Orlando, Thursday, August 7, at 4 p. m. The menu will feature both barbecued lamb and pork. The Orange County Medical Society cordially invites all members of the State Association to attend its annual picnic.

Effective January 1, 1942, members will not be required to pay state dues while in military service. Members of the Florida Medical Association who are in military service are urged to pay their 1941 dues so they may be carried on the roll in 1942 without the payment of dues.

* * *

The following Florida doctors attended the meeting of the American Heart Association in Cleveland, May 30 and 31: M. B. Seltzer, Daytona Beach; E. Sterling Nichol and Max Pepper, Miami; David A. Nathan and Julius R. Pearson, Miami Beach; Spencer A. Folsom, Meredith Mallory and Joseph G. Seltzer, Orlando; James A. Bradley and R. J. Needles, St. Petersburg; Joseph Halton, J. E. Harris and A. Lamar Matthews, Sarasota; and Ruth S. Hart, Winter Park.

SHULER HARDIN ETHEREDGE

Dr. S. H. Etheredge of Tampa died on June 10 after an illness of several months. He was 42 years of age.

Dr. Etheredge was graduated from the South Carolina Medical College in 1924, after which he served his internship at the Mayo Clinic. He was a member of the Association of Resident and Ex-Resident M.D.'s of this institution.

Fifteen years ago Dr. Etheredge came to Tampa where he opened an office in association with Dr. Edward Smoak. Later he limited his practice to internal medicine.

Dr. Etheredge was a member of the Hillsborough County Medical Society, the Florida Medical Association, and a Fellow of the American Medical Association. He is survived by a sister, Mrs. Mattie McDonald of Sebring; five brothers, Parker Etheredge of Okeechobee, William Etheredge of Orlando, Lee Etheredge of Augusta, Ga., Zeke Etheredge of Jacksonville and Wightman Etheredge of Cayce, S. C.



DR. RANDOLPH'S SANITARIUM

JACKSONVILLE, FLORIDA

REGISTERED A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized.
Utmost privacy. Tactful nursing. Number patients limited to
insure maximum attention.

JAMES H. RANDOLPH, M. D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
Phone 2-2330

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle FUNERAL DIRECTOR

17 WEST UNION STREET
Phones



JACKSONVILLE, FLORIDA
5-3766 5-3767

For the Local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*

Wyeth

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

COMPONENT COUNTY SOCIETIES

DADE

The Dade County Medical Society held its regular meeting on the evening of June 4 at the Jackson Memorial Hospital. Dr. John R. Richardson was principal speaker, presenting a paper on "Upper Respiratory Diseases as Foci of Infection." This was discussed by Drs. Carl S. McLemore and Robert M. Oliver.

* * *

DUVAL

A paper on "Pilot Fatigue," given by Lieut. Commander L. E. McDonald of the Medical Corps, U. S. Navy, stationed at the Naval Air Station in Jacksonville, featured a regular meeting of the Duval County Medical Society on the evening of June 3. The meeting was presided over by Dr. James M. Bryant and was the last to be held before the summer recess, the next meeting being scheduled for the first Tuesday in October.

* * *

MANATEE

The Manatee County Medical Society is 100 per cent paid for 1941. This society, comprised of 14 members, is headed by Dr. W. E. Wentzel of Bradenton, president, and Dr. W. D. Sugg of Bradenton, secretary-treasurer. Congratulations!

* * *

PINELLAS

Members of the Pinellas County Medical Society, meeting at the Shrine Club on June 6, viewed a motion picture, "Introduction to Neurology." Dr. Arnold S. Anderson, first vice president, presided.

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

TABER'S CYCLOPEDIA MEDICAL DICTIONARY INCLUDING A DIGEST OF MEDICAL SUBJECTS: Medicine, Surgery, Nursing, Dietetics, Physical Therapy. By Clarence Wilbur Taber and 14 Associates. This medical dictionary, written (not compiled) by a corps of medical specialists, is as much a dictionary of medical subjects as it is a comprehensive medical lexicon. With its 50,000 words, including the latest terms and drugs, this work will be a valuable addition to the library of professional groups concerned with all branches of medicine. Cloth, pp. 1488 with 273 illustrations. Price, thumb-indexed \$3.00, plain \$2.50. Philadelphia: F. A. Davis Company, 1940.

MANAGEMENT OF THE CARDIAC PATIENT. By William G. Leaman, Jr., M. D., F. A. C. P., Assistant Professor of Medicine in Charge of the Department of Cardi-

ology, Woman's Medical College of Pennsylvania, Philadelphia. The principle of presenting cases for illustration in the management of a cardiac patient, although not new, is an excellent one, particularly for undergraduate students and for the practitioner who has not had time to keep abreast of modern cardiac therapy. Unfortunately, this book lacks clarity and direction and there is too much of inadequately given methods for diagnosis and diagnostic procedure rather than remaining firmly within the bounds of its title. Cloth, pp. 705 with 255 illustrations. Price, \$6.50. Philadelphia, Montreal & London: J. B. Lippincott Co., 1940.

ADVERTISERS' NOTES

SURGICAL MASKS AND CAPS

The Holland-Rantos Company have been appointed exclusive distributors for Rantex, the newest development for surgical masks and caps—a patented fibre product which is insoluble in live steam, boiling water or common solvents. A magnification of Rantex shows that it is 176 times more protective than a single layer of gauze. As a result, it provides masks and caps which are exceptionally cool, comfortable, light and free from irritating lint or yarn. They are inexpensive enough to be discarded after a single use; yet they can be autoclaved or sterilized.

The masks are shaped to fit the face; the caps are well tailored. The masks and caps are already being used in many hospitals, including Doctors Hospital in New York, University of Pennsylvania Graduate Hospital in Philadelphia, United States Marine Hospital in Boston, Wisconsin General Hospital, University of Wisconsin in Madison, Wis., and the East Oakland Hospital in Oakland, Calif.

* * *

ANY PHYSICIAN MAY EXHIBIT "WHEN BOBBY GOES TO SCHOOL" TO THE PUBLIC

Under the rules laid down by the American Academy of Pediatrics, their new educational-to-the-public film, "When Bobby Goes to School," may be exhibited to the public by any licensed physician in the United States.

All that is required is that he obtain the endorsement by any officer of his county medical society. Endorsement blanks for this purpose may be obtained on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

Such endorsement, however, is not required for showings by licensed physicians to medical groups for the purpose of familiarizing them with the message of the film.

"When Bobby Goes to School" is a 16-mm. sound film, free from advertising, dealing with the health appraisal of the school child, and may be borrowed without charge or obligation on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

* * *

TETANUS IMMUNIZATION

The disadvantages and hazards of the temporary passive immunity induced by tetanus antitoxin are well known. A prolonged active immunity may now be safely and satisfactorily produced by tetanus toxoid. Several million soldiers in France, England, Canada, and Italy have received active immunization during the past four years and to date no case of tetanus has been reported (Mil. Surgeon, 88: 371, 1941).

It is generally accepted that alum-precipitated tetanus toxoid is a much more efficient antigen than plain toxoid. Once an individual has received immunization, a stimulating or booster dose at any subsequent time will markedly accelerate the serum antitoxin to a level which will definitely protect from tetanus. Tetanus toxoid is supplied by Eli Lilly and Company in the alum-precipitated form.

4 WARM Friends IN FLORIDA



MIAMI BILTMORE
Coral Gables, Miami
Center of the Wintertime World



RONEY PLAZA
Miami Beach
America's Finest Ocean Front Hotel



PALM BEACH BILTMORE
Palm Beach
On Beautiful Lake Worth



WHITEHALL
Palm Beach
Sustaining the Palm
Beach Tradition

MIAMI BILTMORE

RONEY PLAZA

PALM BEACH BILTMORE

WHITEHALL

Florida Medical Association
MEETS AT
Palm Beach Biltmore
April 1942

SOUTHERN FLORIDA *Hotels*
Florida's Most Distinguished Resorts

ALL SPORTS FACILITIES ★ FREE AEROCAR TRANSPORTATION

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

Transfusions in Infants, BURCH, J. E., Miami, South. M. J. 33: 972-974 (Sept.) 1940.

Blood transfusions in infants may seem a formidable procedure to many physicians because of the lack of suitable veins and the difficulty of retaining needles of sufficient caliber in the veins which may be used. The author routinely uses an ankle vein for transfusion in infants, the vein being exposed by cutting down on it and inserting a good sized needle or cannula. It is interesting to note that after the transfusion the ligatures are removed and a pressure dressing applied so that the vein can heal and be used again. The author discusses the advantages and disadvantages of other sites, such as the antecubital veins, the scalp veins, fontanel puncture, the jugular veins and the intercostal veins. The choice of the ankle veins as the most feasible site for transfusion in infants is more appreciated when one considers its advantages in giving an adequate and stable venipuncture for direct transfusions which may be more valuable in infants than indirect methods in such conditions as pneumonia, pyelitis and blood dyscrasias in which whole blood is desirable.

Fever Therapy by Physical Means in Dermatology, PHILLIPS, KENNETH., and LITTERER, A. BUIST, Miami, Arch. Phys. Therapy 21:533-540 (Sept.) 1940.

The authors discuss the physiology of the skin and subcutaneous tissues, emphasizing the harmony in which they both work with the central and autonomic nervous system in regulation of temperature.

A tabulation gives variations in age, sex, duration of disease, technic, observation and relapse periods, and clinical results in two separate series of dermatologic disorders treated by fever therapy. These conditions include seborrheic dermatitis, endocrinopathies with associated cutaneous manifestations, urticaria, erythema multiforme and the eczematoid group.

The authors also furnish some interesting results of biochemical studies of the sweat of several patients in this group.

MIAMI RETREAT, INC.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

Building Heated and Ventilated

Psychopathic Annex—Sound Proof

Window Guards Eliminated

Air Conditioned



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

REPAIR AND SAVE

We are well equipped to thoroughly repair all electric lighted and other diagnostic instruments, sterilizers, etc.

Surgical instruments repaired, Chrome plated and sharpened at reasonable prices.

Please give us a trial.

EVERHART SURGICAL SUPPLY CO.

493 Peachtree Street, N. E.

ATLANTA, GEORGIA

THE TUCKER SANATORIUM, *Incorporated*

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable

Convenient

Site High and Healthful

E. W. ALLEN, M.D., *Department for Men*

H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)

Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks' Intensive Course in Surgical Technique with practice on living tissue, starting every two weeks. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks' Intensive Course starting October 6th. Two Weeks' Course in Gastro-Enterology starting October 20th. Four Weeks' Course in Internal Medicine starting August 4th. Two Weeks' Intensive Course in Electrocardiography and Heart Disease starting August 4th.

FRACTURES & TRAUMATIC SURGERY—Two Weeks' Intensive Course starting September 22nd. Informal Course every week.

GYNECOLOGY—Two Weeks' Intensive Course starting October 20th. One Month Personal Course starting August 25th. Clinical Course every week.

OBSTETRICS—Three Weeks' Personal Course starting August 4th. Two Weeks' Intensive Course starting October 6th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks' Intensive Course starting September 8th. Informal Course every week.

OPHTHALMOLOGY—Two Weeks' Intensive Course starting September 22nd. Informal Course every week.

ROENTGENOLOGY—Courses in X-Ray Interpretation, Fluoroscopy, Deep X-Ray Therapy every week.

**GENERAL, INTENSIVE AND SPECIAL COURSES
IN ALL BRANCHES OF MEDICINE, SURGERY
AND THE SPECIALTIES**

Teaching Faculty

Attending Staff of Cook County Hospital

Address

Registrar, 427 South Honore Street, Chicago, Illinois

WOMAN'S AUXILIARYTO THE
FLORIDA MEDICAL ASSOCIATION, INC.**OFFICERS**

MRS. W. J. BARGE, President *Miami*
 MRS. F. W. KRUEGER, First Vice-President.....*Jacksonville*
 MRS. R. L. CLINE, Second Vice-President.....*Lakeland*
 MRS. PAUL KELLS, Corresponding Secretary.....*Miami*
 MRS. C. H. MURPHY, Recording Secy.-Treas.*Bartow*
 MRS. M. J. FLIPSE, Historian.....*Miami*
 MRS. L. C. INGRAM, Parliamentarian*Orlando*

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity....*Jacksonville*
 MRS. P. J. MANSON, Hygeia*Miami*
 MRS. RUPERT STOVALL, Public Relations.....*Ft. Lauderdale*
 MRS. E. M. HENDRICKS, Legislation*Ft. Lauderdale*
 MRS. GORDON H. IRA, Finance.....*Jacksonville*
 MRS. T. C. KENASTON, Exhibits.....*Cocoa*
 MRS. CLYDE ANDERSON, Archives*St. Petersburg*
 MRS. GEORGE C. TILLMAN, Student Loan*Gainesville*
 MRS. F. W. KRUEGER, Program.....*Jacksonville*
 MRS. R. L. CLINE, Organization.....*Lakeland*
 MRS. JOHN H. OWENS, Bulletin.....*Jacksonville*

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B"*Gainesville*
 MRS. E. W. VEAL, Northeast "C"*Jacksonville*
 MRS. J. C. GRIFFIN, Southwest "D"*Tampa*
 MRS. W. C. PAGE, South Central "E".....*Cocoa*
 MRS. HILLARD WILLIS, Southeast "F".....*Coral Gables*

NATIONAL MEETING

The nineteenth annual session of the Woman's Auxiliary to the American Medical Association was held in Cleveland, Ohio, June 2 to 6, with headquarters at the Hotel Carter.

The business session was called to order on Tuesday morning by the president, Mrs. V. E. Holcombe, in the Ballroom of the Carter Hotel. The Rev. Doctor Walter H. Stark, of the Pilgrim Congregational Church, gave the invocation. Mrs. J. Edwin Purdy gave the address of welcome and Mrs. C. C. Tomlinson, the response.

Reports from the national officers, chairmen and state presidents were interesting and inspiring. The In Memoriam service, conducted by Mrs. H. J. Dooley, was very impressive. High tribute was paid Mrs. V. E. Holcombe for her splendid report which reflected much credit to the national organization. Flags of 40 states were carried in colorful procession to the platform as state presidents made their annual reports. Mrs. Rogers N. Herbert presented Mrs. V. E. Holcombe, retiring president, with a President's pin in a most dignified manner. She then installed the new officers for the coming year as follows:

President, Mrs. R. E. Mosiman, Seattle, Wash.; President-elect, Mrs. Frank Haggard, San Antonio, Texas; Vice presidents, Mrs. John Bauer, Brooklyn, N. Y., Mrs. A. E. Anderson, Fresno, Cal., Mrs. A. E. Christen-

*Effective, Convenient
and Economical*

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

*Mercurochrome, H.W.&D.**(dibrom-oxymercuri-fluorescein-sodium)*

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

*Literature furnished on request***HYNISON, WESTCOTT & DUNNING, INC.**

BALTIMORE, MARYLAND

Ambulance Directory**CARY HAND**

32-36 Pine Street

ORLANDO, FLORIDA

Telephone 4181

COMBS FUNERAL HOMES**Ambulance Service**

Phone 32101

MIAMI, FLORIDA

Phone 52101

MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.



Brawner's Sanitarium

SMYRNA, GEORGIA
(Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.

Approved diagnostic and therapeutic methods.

Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.

Special Department for General Invalids and Senile cases at Monthly Rates.

JAMES N. BRAWNER, M.D., *Medical Supt.*

ALBERT F. BRAWNER, M.D., *Resident Supt.*

86c out of each \$1.00 gross income
used for members benefit

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE



For Ethical Practitioners Exclusively
(56,000 POLICIES IN FORCE)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
--------------------------------------	----------------------------

\$5,000.00 ACCIDENTAL DEATH \$25.00 weekly indemnity, accident and sickness	For \$32.00 per year
--	----------------------------

\$10,000.00 ACCIDENTAL DEATH \$50.00 weekly indemnity, accident and sickness	For \$64.00 per year
---	----------------------------

\$15,000.00 ACCIDENTAL DEATH \$75.00 weekly indemnity, accident and sickness	For \$96.00 per year
---	----------------------------

39 years under same management

\$2,000,000 INVESTED ASSETS

\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for
protection of our members

Disability need not be incurred in line of duty—benefits from the
beginning day of disability

Send for application, Doctor, to

400 First National Bank Building • Omaha, Nebraska

*Announcing to the Medical Profession
of Florida*

BUROW'S SOLUTION N.F.

LEAD FREE

(SOLUTION ALUMINUM ACETATE)

Produced after seven months clinical test at Bellevue
Hospital, New York, and has been tentatively approved
by the Pure Food and Drug Administration.

Avoids lead absorption when applied to open wounds

Specification of Tampa Drug Company's label assures
a standardized, uniform product.

TAMPA DRUG COMPANY — Tampa, Florida

berry, Knoxville, Tenn., and Mrs. T. R. Urnston, Bay City, Mich.; Recording Secretary, Mrs. Samuel Flowers, Middleboro, Ky.; Treasurer, Mrs. David Thomas, Lock Haven, Pa.; one-year Directors, Mrs. V. E. Holcombe, Charleston, W. Va., and Mrs. Fred C. Oldenburg, of 11355 Harbor View Drive, Cleveland, O.; two-year Directors, Mrs. James B. Farley, Pueblo, Col., Mrs. James P. Simmons, Chicago, Ill., and Mrs. W. K. West, Oklahoma City, Okla.

In Mrs. Mosiman's inaugural address she urged a renewal of the Auxiliary's pledge of loyalty and cooperation in the national defense program of the National Congress of Parent-Teachers and for individual assistance to the Red Cross. "Such work properly coordinated," she said, "can be expanded to meet the special needs of health defense in time of war. To this end let us pledge our unified effort, accomplishing our purpose in the spirit of service to humanity as do the members of the great humanitarian profession with which we have the privilege of association."

Many delightful entertainment features were sponsored by the hostess Auxiliary for the pleasure of those attending the convention. There were 1,337 registered; the total membership was reported as being 27,179.

DUVAL COUNTY

The June meeting of the Woman's Auxiliary to the Duval County Medical Society was held in the beautiful log cabin home of Dr. and Mrs. John H. Mitchell, on the St. Johns river near Mandarin, on June 5. The president, Mrs. Victor A. Hughes, presided.

The reports of officers and committee chairmen showed considerable increase in the activities of the Auxiliary during the past fiscal year. Much emphasis was placed on the need for continued cooperation of members with the National Defense Program and with the work of the philanthropic department of the Auxiliary.

Mrs. Raymond H. King gave a very interesting report on the State Medical meeting held in Jacksonville in April. The report of the president, Mrs. Victor A. Hughes, was enthusiastically received with a rising vote of thanks.

Officers elected for the coming year were as follows: President, Mrs. Raymond H. King; Vice-president, Mrs. J. D. Ferrara; Secretary, Mrs. Karl B. Hanson; and Treasurer, Mrs. Wm. H. McCullagh. Committee Chairmen named were: Publicity, Mrs. E. W. Veal; Public Relations, Mrs. Sullivan G. Bedell; Philanthropic, Mrs. Edward Canipelli; Bulletin, Mrs. D. E. Harrell; Social, Mrs. Lucien Y. Dyrenforth; Hygeia, Mrs. Tracy Haverfield; Historian, Mrs. J. W. Hayes; Parliamentarian, Mrs. Gordon H. Ira; Exhibits, Mrs. John F. Lovejoy; Legislation, Mrs. S. R. Norris, and Organization, Mrs. Victor A. Hughes.

During the social hour delicious refreshments were served.



1941 DISTRICT MEETINGS

- "A" Tallahassee, October 2
- "B" Gainesville, October 3
- "C" St. Augustine, October 4
- "D" Bartow, October 31
- "E" Orlando, November 1
- "F" Ft. Lauderdale, October 30

J. K. ATTWOOD, Pharmacist

Medical Arts Building
1022 Park Street
JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS
STAINS (MICROSCOPIC)
PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

COMPONENT SOCIETIES BY DISTRICTS

COUNTY SOCIETIES	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILORS AND DATES OF MEDICAL DISTRICT MEETINGS
				Total	Paid	
Bay	James M. Nixon, M.D. Panama City	William C. Roberts, M.D. Panama City		12	10	A-1-'42 W. C. Roberts, M.D. Panama City
Escambia *Santa Rosa	W. P. Hixon, M. D. 24 W. Chase St. Pensacola	A. L. Stebbins, M.D. State Board of Health Bldg. Pensacola	2nd Tuesday 8:00 P. M.	51	43	
Walton-Ocalaosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	
Washington-Holmes	N. J. Dawkins, M. D. Vernon	B. W. Dalton, M. D. Vernon		7	6	
Franklin-Gulf	Thos. Meriwether, M.D. Wewahatchka	J. R. Nortou, M.D. Fort St. Joe	3rd Thursday	7	3	A-2-'43 C. D. Whitaker, M. D. Marianna
Jackson *Calhoun	M. Q. Burns, M. D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
Leon-Gadsden-Liberty- Wakulla-Jefferson	Sterling E. Witholt, M. D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	42	30	
Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M. D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	10	B-3-'43 Eugene G. Peek, M.D. Ocala
Madison-Suwannee	J. M. Price, M.D. Live Oak	I. H. Black, M.D. Live Oak		8	100%	
Taylor *Davie, Lafayette	Ralph J. Greene, M.D. Perry	Charles A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	
Alachua *Bradford, Gilchrist Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	J. Maxey Dell, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	29	17	B-4-'42 Alva T. Cobb, M.D. Gainesville
Marion *Levy	Eugene G. Peek, M. D. Commercial Bk. & Tr. Bldg. Ocala	Harry F. Watt, M. D. Box 146 Ocala	3rd Thursday 12:30 P. M.	26	20	
Pasco-Hernando- Citrus	William B. Moon, M. D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	14	
Duval *Clay, Nassau	S. R. Norris, M. D. Medical Arts Bldg. Jacksonville	F. Gordon King, M. D. 422 St. James Bldg. Jacksonville	1st Tuesday 8:15 P. M.	186	184	C-5-'43 Lucia Y. Dyrnforth, M.D. Jacksonville
St. Johns	A. C. Walkup, M. D. East Coast Hospital St. Augustine	Charles C. Grace, M. D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	
Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganious, M. D. Palatka	2nd Tuesday in Feb., April, June, Aug., Oct., Dec. 7:00 P. M.	11	9	C-6-'42 Maximilian Stern, M.D. Daytona Beach
Volusia *Flagler	J. R. Chandler, M. D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 238 1/2 S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	35	
Hillborough	Robert G. Nelson, M. D. 712 Citizens Bank Bldg. Tampa	Jamea S. Grable, M. D. 811 Citizens Bank Bldg. Tampa	1st Tuesday 8:00 P. M.	109	83	D-7-'43 John R. Bolling, M.D. Tampa
Manatee	W. E. Wentzel, M.D. Box 245 Bradenton	Wm. D. Sugg, M. D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	
Pinellas	N. W. Gable, M.D. 116th Field Artillery Camp Blanding	W. C. McConnell, M.D. 313 First Federal Bldg. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	104	100%	
Sarasota	John C. Patterson M. D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	17	
DeSoto-Hardee-High- lands-Charlotte- Glades	A. T. Elde, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	21	20	D-8-'42 H. V. Weems, M.D. Sebring
Lee *Collier, Hendry	M. F. Johnson, M. D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	
Polk	Bruce R. Tinkler, M. D. Lake Wales	S. Edgar Watson, M. D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	61	58	
Brevard	T. C. Kenaston, M. D. 501 Dolanney Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	9	E-9-'42 Carl D. Hoffmann, M.D. Orlando
Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bank Bldg. Leesburg	Clyde F. Bowle, M. D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	19	11	
Orange *Osceola	Frank D. Gray, M. D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	87	77	
Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	10	
St. Lucie-Okeechobee- Indian River-Martin	Joseph B. Kollar, M. D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	E-10-'43 E. R. Hardee, M.D. Vero Beach
Broward	Frank Donnlston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	41	88	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
Palm Beach	Wilbur O. Arnold, M. D. Box 1785 W. Palm Beach	William E. Hippus, M. D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	65	
Dade	C. Larimore Perry, M. D. 525 N. E. 15th St. Miami	Herbert Elchert, M.D. 538 DuPont Bldg. Miami	1st Tuesday 8:30 P. M.	335	231	F-12-'43 W. Duncan Owens, M.D. Miami Beach
Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

*Supervise and aid until organized separately.

DEXTRI-MALTOSE

True Economy



IT is interesting to note that a fair average of the length of time an infant receives Dextri-Maltose is five months: That these five months are the most critical of the baby's life: That the difference in cost to the mother between Dextri-Maltose and common sugars is about \$7 for this entire period—a few cents a day: That, in the end, it costs the mother less to employ regular medical attendance for her baby than to attempt to do her own feeding, which in numerous cases leads to a seriously sick baby eventually requiring the most costly medical attendance.

*"The Measure of Economy
Is Value, Not Price."*

MEAD JOHNSON & COMPANY
Evansville, Indiana, U.S.A.



The JOURNAL

of the

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 2

Jacksonville, Florida, August, 1941

Yearly Subscription, \$3.00
Single Copy, 30¢

THE JOURNAL OF MEDICINE

SEP -2 1941

LIBRARY

CONTENTS

Sporotrichosis	Elmo D. French, M. D., Miami	61
Treatment of Injuries of the Hand	M. Paul Travers, M. D., Miami Beach	66
Cardiac Arrhythmias	J. W. Annis, M. D., Lakeland	71
A Review of Some of the Drugs Commonly Used in Urology	Alvin L. Mills, M. D., St. Petersburg	78
Treatment of Gonorrhea with Sulfanilamide	H. J. Ireland, M. D., New York, and C. Lippow, M. D., Miami Beach	82
The Value of Intrapleural Pneumonolysis in Artificial Pneumothorax Therapy in Pulmonary Tuberculosis	Thomas C. Black, M. D., Orlando	84
Editorials: Your District Meeting; Danger of Eye Injuries from Blasting Caps		87
Chattahoochee Valley Medical Society		88
Examinations for Medical Positions Announced by Civil Service Commission		88
Sulfanilamide Effective Against Flare-ups of Rheumatic Fever ..		88
New Test for Determining Adequacy of Connecting Varicose Veins		89
Births, Marriages and Deaths		89
State News Items		89
Component County Societies		90
Abstract Department		92
Books Received		92
Woman's Auxiliary		94
Advertisers' Notes		96
State and Sectional Meetings		98
Component Societies by Districts		99

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942
Southern Medical Association, St. Louis, November 10-13, 1941



Petrolagar^{*} . . .

As a Bland Cleansing Enema

• The effect of a Petrolagar cleansing enema is to soften thoroughly the inspissated stool, and help establish a complete, comfortable bowel movement. Petrolagar serves this purpose well because it is miscible with water, a virtue that enables an even dissemination of minute oil globules throughout the residue in the colon.

The Petrolagar cleansing enema is preferable to irritating soap solutions in either the home or the hospital, because of its gentle, but thorough softening action.

Consider the routine use of the Petrolagar cleansing enema in the hospital, postoperatively or in obstetrical cases, where normal bowel habits are temporarily disturbed.

HOW TO USE: Mix 3 ounces of Petrolagar Plain with water sufficient to make one pint to one quart, as desired, and administer by gravity. For retention enema administer at body temperature.



^{}Petrolagar—The trademark of Petrolagar Laboratories, Inc., brand emulsion of mineral oil . . . Liquid petrolatum 65 c.c. emulsified with 0.4 gm. agar in a menstruum to make 100 cc.*

Petrolagar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE
FLORIDA MEDICAL ASS'N CONVENTION
APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast. 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

Hotels

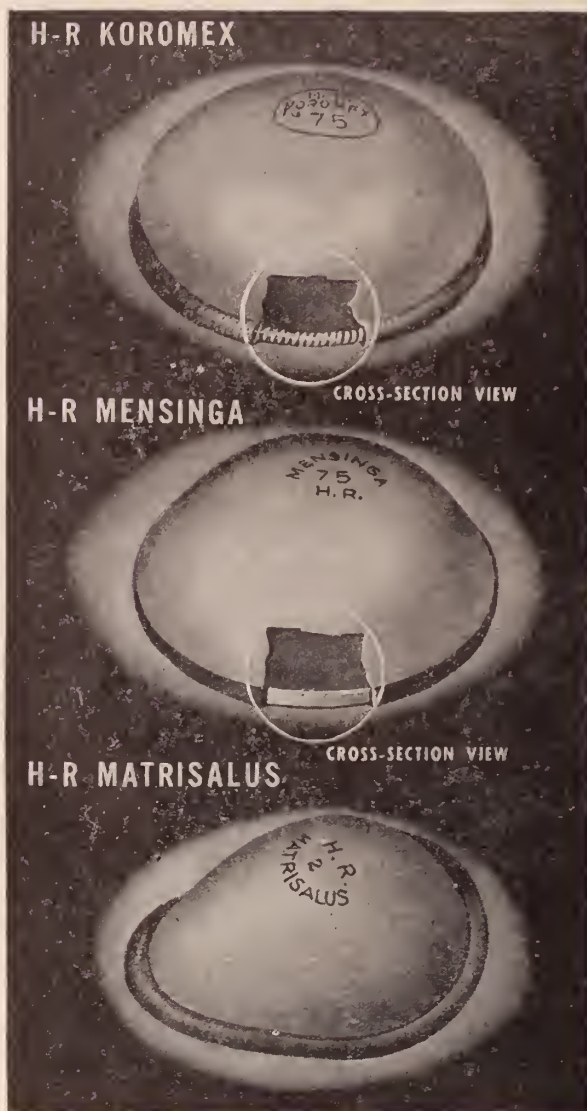
At Miami-The Miami Biltmore At Palm Beach-Palm Beach Biltmore

The Roney Plaza

Whitehall

ALL SPORTS FACILITIES ☆ **FREE AEROCAR TRANSPORTATION**

Diaphragms for EVERY Condition



HOLLAND-RANTOS offers a most complete line of diaphragms. We invite inquiries concerning specific conditions.

• • •

The H-R Koromex diaphragm (coil spring type) is available in sizes from No. 50 to No. 105 mm., and is indicated for use in all normal anatomies.

The H-R Mensinga diaphragm (watch or flat spring) is available in sizes from No. 50 to No. 90 mm. including half sizes, and is indicated where there is a slight redundancy of the mucosa of the retro pubic space, or a slight relaxation of the anterior vaginal wall.

The H-R Matrisalus diaphragm is available in sizes—No. 1 to No. 6 corresponding to 65, 70, 75, 80, 85 and 90 mm. This special shaped diaphragm is indicated in cases of cystocele or prolapse where, owing to relaxed vaginal walls, the ordinary diaphragm cannot be retained in position.

**Send for copy of "Physician's Diaphragm Chart
and Fitting Technique"**

HOLLAND-RANTOS CO., Inc.

551 FIFTH AVENUE - - NEW YORK
308 WEST WASHINGTON ST. - CHICAGO
520 WEST 7TH STREET - LOS ANGELES

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

One of a series of advertisements published by Parke, Davis & Co. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.



Private Smith reports for Sick Call

PRIVATE TOM SMITH is feeling a little under the weather.

If he were back in civilian life, the chances are he'd say, "I'll be all right in a little while," and he'd show up for work as usual.

But in this man's Army of ours, a soldier who feels below par is required to report for "Sick Call," even if he thinks there's nothing much wrong. Private Tom Smith is simply obeying orders.

Because of this wise institution known as "Sick Call," our Army doctors have an opportunity to combat illnesses at the very start and are usually able to prevent them from edging over into the danger zone. This is one of the reasons why the standard of health in our Army of 1941 sets an all-time high.

In this there is a valuable lesson for many a civilian . . .

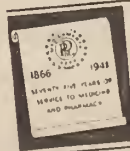
We're thinking now of the man who permits himself . . . and his family . . . to run risks which no soldier is allowed to take. We're thinking of the man who says, "If I don't feel

better tomorrow, I'll see the doctor." But will he? And when he does, will it be too late? Too late to prevent a serious illness, or too late to gain the advantage of time in treating a disease already contracted.

So why not establish the "Sick Call" system in your household? Stomach ache, you know, is sometimes the first warning of appendicitis; a sore throat may be the forerunner of a condition which requires expert attention. When you, or any of your family, develop even a seemingly minor ailment, don't waste time which may be precious.

Call your doctor, and let *him* decide whether or not the ailment is trivial—and what should be done about it. He knows—you don't. Report for "Sick Call" promptly

Copyright, 1941, Parke, Davis & Co.



PARKE, DAVIS & COMPANY
Detroit, Michigan

The World's Largest Makers of
Pharmaceutical and Biological Products

SEE YOUR DOCTOR



"In the Mountains of Meridian"
HOYE'S SANITARIUM

Meridian, Miss.

Diagnosis and Treatment of
NERVOUS AND MENTAL DISEASES
ALCOHOLIC AND DRUG ADDICTIONS
Especially Equipped for the Treatment of
MENTAL DISORDERS

Convalescents, Elderly People and those Requiring
METRAZOL THERAPY Given Special Monthly
Rates. **ELECTRO-SHOCK THERAPY** also Given
to Eliminate Unpleasant Sensations which may
Occur in Metrazol Therapy. Personal Supervision
of Patients. Reasonable Rates. Consulting Physicians.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

Fellow of the American Psychiatric Association

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

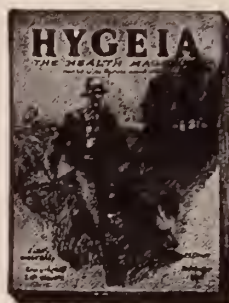
JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail



HYGEIA

The Health Magazine

Will teach your patients
about diet and exercise,
child welfare, and house-
hold sanitation, the value
of professional service and
the importance of health-
ful living. It is a splendid
investment. Keep it on
your office table. Here is
a special offer—\$3.00 a
year; 6 months for \$1.00.
Pin a dollar to this ad
and mail to

AMERICAN MEDICAL ASSOCIATION

535 N. DEARBORN ST., CHICAGO

MIAMI RETREAT, INC.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

Building Heated and Ventilated

Psychopathic Annex—Sound Proof

Window Guards Eliminated

Air Conditioned



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

**Cook County
Graduate School of Medicine**

(In affiliation with Cook County Hospital)

Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks' Intensive Course in Surgical
Technique with practice on living tissue, starting every
two weeks. General Courses One, Two, Three and Six
Months; Clinical Courses; Special Courses. Rectal
Surgery every week.

MEDICINE—Two Weeks' Intensive Course starting
October 6th. Two Weeks' Course in Gastro-Enterology
starting October 20th. One Month Course in Electro-
cardiography and Heart Disease every month, except
December.

FRACTURES & TRAUMATIC SURGERY—Two
Weeks' Intensive Course starting September 22nd. In-
formal Course every week.

GYNECOLOGY—Two Weeks' Intensive Course starting
October 20th. One Month Personal Course starting
August 25th. Clinical and Diagnostic Course every
week.

OBSTETRICS—Two Weeks' Intensive Course starting
October 6th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks' Intensive Course
starting September 8th. Informal Course every week.

OPHTHALMOLOGY—Two Weeks' Intensive Course
starting September 22nd. Informal Course every week.

ROENTGENOLOGY—Course in X-Ray Interpretation,
Fluoroscopy, Deep X-Ray Therapy every week.

**GENERAL, INTENSIVE AND SPECIAL COURSES
IN ALL BRANCHES OF MEDICINE, SURGERY
AND THE SPECIALTIES**

Teaching Faculty

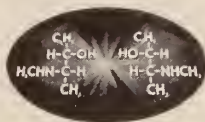
Attending Staff of Cook County Hospital

Address

Registrar, 427 South Honore Street, Chicago, Illinois

RACÉPHEDRINE

in the Hay Fever Season



On local application to the nasal mucous membrane, Solution Racéphedrine Hydrochloride (Upjohn) diminishes hyperemia and reduces swelling, thus bringing comforting relief to the hay fever patient.

Administered orally, Capsules Racéphedrine Hydrochloride (Upjohn) may be useful to prevent asthmatic attacks, and in the treatment of hay fever and urticaria.

RACÉPHEDRINE HYDROCHLORIDE (UPJOHN)

SOLUTION (1 % in Modified Ringer's Solution),
1 oz. dropper bottles and pints.

CAPSULES ($\frac{3}{8}$ gr.), bottles of 40 and 250.



Upjohn
KALAMAZOO, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

CORNERSTONES

Only through ability to establish and maintain high standards and to contribute new and useful products for the control of disease can a pharmaceutical manufacturer become a helpful factor in world medicine.

Combined Diphtheria Toxoid-Tetanus Toxoid, Alum Precipitated



Two objectives may be accomplished with Combined Diphtheria Toxoid-Tetanus Toxoid, Alum Precipitated. The same procedure which immunizes against diphtheria also protects against tetanus. Combined Diphtheria Toxoid-Tetanus Toxoid, Alum Precipitated, Lilly, is given subcutaneously in two doses three months or more apart.

ELI LILLY AND COMPANY

Principal Offices and Laboratories, Indianapolis, Indiana, U. S. A.

SPOROTRICHOSIS

Report of a Case

Elmo D. French, M. D.

Miami

Sporotrichosis is a disease produced by one of several species, or one of several varieties of the same species, of fungus of the genus *Sporotrichum*. This disease is more prevalent in the Mississippi and Missouri valleys of this country and in France than elsewhere, although it has been reported in widely separated sections of the United States and in most foreign countries.

Schenck¹ first reported sporotrichosis in the United States in 1898, and the organism he isolated was again isolated in 1900 by Hektoen and Perkins.² They named this organism *Sporothrix schencki*, a term later changed to *Sporotrichum schencki*. De Beurmann and Ramond³ in 1903 reported sporotrichosis in France, and Matrachot and Ramond⁴ classified the causative organism as of a distinct species which they termed *Sporotrichum beurmanni*.

The clinical, pathologic and bacteriologic studies of de Beurmann³ and of Gougerot⁴ in France have contributed most to the knowledge of the disease. Among the species pathogenic for man, *S. schencki* occurs most frequently in this country and *S. beurmanni* elsewhere. There are many species of the genus *Sporotrichum*, and while other species have been reported as human pathogens, their pathogenicity is seriously questioned.

S. schencki and *S. beurmanni* are found on many types of vegetation, on a number of domestic and laboratory animals and on insects. Although usually existing as saprophytes, they at times give rise in animals to disease. At ordinary temperatures they grow readily on a variety of culture media in the open air and are resistant to sunlight; hence even contaminated soil is a possible source of infection.

The majority of reported cases of human sporotrichosis have resulted from infection by

the causative microorganisms present on live or dead vegetation and have followed injury of the skin or mucous membranes. A number of cases have resulted from the prick of the barberry thorn. Infection caused by this fungus has, however, occurred after the bite of an animal or the sting of an insect, and experimentally the organism has been shown to be capable of penetrating the intestinal mucosa.

In sharp contrast to the many proved possible sources of infection is the rarity of the disease. Apparently man is not a favorable host to the parasite.

Sporotrichosis is usually amenable to treatment with iodides even though the disease may have existed for many years. Its importance lies in the necessity of differentiating it from more frequently described diseases which are often less amenable to treatment, but which it closely simulates. It is especially apt to be mistaken for tuberculosis, ecthyma and syphilis, and at times for tularemia and for other mycoses. Failure to diagnose sporotrichosis may lead to unnecessary loss of occupation, to protracted invalidism, to false stigma of serologically negative syphilis and even to disastrous surgery. Dr. Howard Hailey of Atlanta, in a personal communication, cited an instance in which a patient died following amputation of a hip joint diseased with sporotrichosis. The patient was a man 42 years of age, and his history indicated he had suffered with the disease for thirty-nine years.

Four chief clinical varieties of sporotrichosis have been described:

1. A localized lymphangitic type.
2. A disseminative gummatous type, which may be subdivided into ulcerated, nonulcerated, single or multiple abscessed and mixed groups.
3. A dermic and epidermic type.
4. An extracutaneous type affecting the mucous membranes, bones, viscera and central nervous system.

Features common to all clinical types are chronicity and polymorphism of the disease and

With the laboratory assistance of Fred D. Weidman, M. D., University of Pennsylvania.

Read before the Sixty-Eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, April 28, 29 and 30, 1941.

of the individual lesions, and the usual preservation of a good state of health.

I am aware of only one instance in which sporotrichosis originating in Florida has been reported up to the present time. Dr. William M. Davis of St. Petersburg, in a personal communication, described a case presented by him in 1938, which he diagnosed clinically as sporotrichosis without proving the diagnosis through culture of the organism. In this case cure was effected by administration of iodides. From Dr. Davis' description, his case was of the same localized lymphangitic clinical type as the one I now report in which the organism causing the disease was isolated from the lesion.

REPORT OF CASE

S. K., a negro-Indian woman aged 57, applied Nov. 6, 1940 to the Dermatological Department of the Miami City Clinic for treatment, complaining that five weeks previously a painful sore had appeared on the back of the right hand. She recalled no injury to the hand, but the sore had enlarged rapidly; soon lumps had appeared in the neighborhood of the sore and, later, on the forearm and arm.

EXAMINATION: On the dorsum of the right hand between the first and second metacarpals was a dime-sized verrucous lesion surrounded by a reddened edematous zone in which were a variable number of small papules and nodules. Extending from this site lateroanteriorly on the forearm and medially up the arm to the axilla, was a continuous cordlike linear tract. Along the course of this tract were multiple pea to hazelnut-sized nodules varying in consistency from firm to centrally soft in the



FIG. 1. *Sporotrichosis. Localized lymphangitic type. Causative organism was cultured from nodule just below the cubital fossa.*

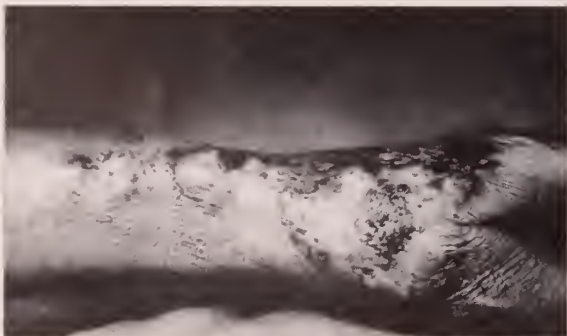


FIG. 2. *Inoculation "chancre." Suture indicates site of lesion excised for biopsy.*

largest nodule. There was little sensitivity to touch. The epitrochlear and axillary lymphatic glands were not enlarged. General examination disclosed no additional complaints. The patient was well nourished. There was no elevation of temperature.

LABORATORY EXAMINATION: The blood count was normal. The Kahn test gave no evidence of syphilis. One of the nodules at the periphery of the original lesion was removed for biopsy. The fluctuating center of the largest nodule, located on the forearm, was punctured, and the viscid yellowish fluid which exuded was transferred to a nutrient agar medium for culture. The specimen for biopsy and the culture were submitted to Dr. Weidman for examination. The following is a partial report of his findings:

"**Summary and Discussion:** Only one thing is certain, namely, that this is a specific infectious granuloma. The vascular hyperplasia and the character of the walls of the cells strongly suggest syphilis, and the granulomas, too, are compatible with that idea. The granulomatous changes could also be those of sporotrichosis, even a pseudoepitheliomatous hyperplasia. This is, however, a very early lesion. Certainly tuberculosis can be eliminated in view of the rapid development of the lesion, and the histology eliminates actinomycosis. There thus remain only syphilis and sporotrichosis for consideration, and considered all in all, the writer favors the latter. Special stains are being employed, but with no high hopes, and in any event cultures should be taken.

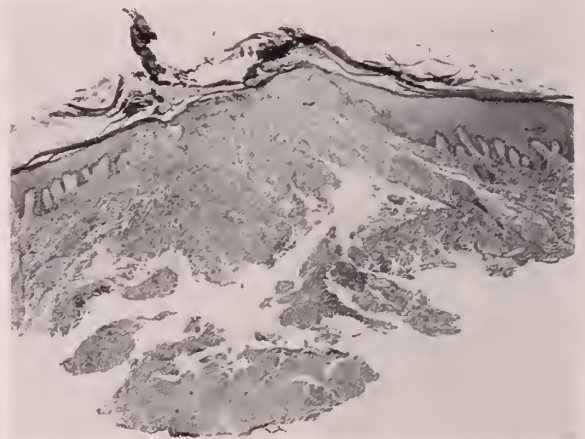


FIG. 3. *Gumma, owing to Sporotrichum schenckii, showing location of the deep infiltration. The highly magnified view which follows was taken from the minute circumscribed focus at the lowermost edge of the section (X25).*

"**Cultures:** From the pure culture supplied by Dr. French subcultures were planted on Sabouraud's test medium and conservation medium, and in glucose bouillon hanging drop.

"**Test Medium:** This was a modification known as Pennsylvania medium. (Parke and Williams, *Pathogenic Microorganisms*, Lea & Febiger, 11th edition, 1939, p. 803.) Growth became visible within four days; it was faintly brown even at this early stage. At no time did it exhibit any pasty qualities suggestive of a species of yeast fungi. Instead, the surface was dull and delicately fuzzy. Within three weeks colonies measured 3 by 2 cm. The centers were elevated and delicately cerebriform. The peripheral zone was brownish gray. The underlying medium was definitely discolored brown and was evidently penetrated to a goodly distance by subsurface mycelium.

"**Conservation Medium:** Surface growth was confined to a thin, delicately filamentous growth 1 cm. in diameter. It was faintly creamy yellow; the underlying medium was not discolored, but was infiltrated by subsurface mycelium all the way to the back wall of the tube, a distance of some 6 or 8 mm.



FIG. 4. Characteristic gumma. The minute tuberculoid granuloma lay at the lowest edge of the section shown in the preceding figure. The suppurative traits of sporotrichosis are reflected in the polymorphonuclear leukocytes included in the granuloma. (X256).

"Hanging Drop Preparation: At three weeks the mycelium was delicate and comparatively frequently branching. Upon it enormous numbers of conidia were arranged. They occurred in smaller or larger clusters, some of which were enormous. In addition, they grew as massive cuffs along the sides of hyphae, sometimes along considerable stretches. The conidia were small and pyriform.

"The features described above are those of *S. schencki*. The masses of conidia, as arranged in the thick, cufflike manner, have been held in some quarters to indicate a separate species, namely *S. beurnmanni*. It is the consensus, however, that only one species is concerned, namely *S. schencki*."

DIAGNOSIS: The disease was diagnosed as a localized lymphangitic type of sporotrichosis.

TREATMENT AND RESULTS: During the first week potassium iodide 2 Gm. a day was administered by mouth. The dose was increased to 4 Gm. daily during the second and third weeks, by the end of which time only a slightly roughened scar at the initial site of inoculation and a pigmented skin along the previously involved lymphatic tract could be detected. Treatment with the iodide was then continued for three months in reduced dosage. There has been no further observed evidence of the disease.

COMMENT

While culture of the organism is proof of the diagnosis, nevertheless, if, because of the inaccessibility of the lesions or for other reasons, this may not be possible, additional diagnostic tests for sporotrichosis are at times helpful. The following have been described:

The sporoagglutination test of Widal and Abrami is analogous to the microscopic sero-

diagnosis of typhoid fever. The serums of patients with sporotrichosis will agglutinate suspensions of the characteristic spores in dilutions of from 1 to 150 to 1 to 800, whereas normal serums will not agglutinate a suspension of the spores in dilutions higher than 1 to 50. This test may be utilized either for diagnosis or as an indication of the necessity of continuing treatment in a given case.

Cutaneous sensitization tests with extracts of sporotrichin have been attempted, but it is said the tests are not specific for the organism.

Intraperitoneal inoculation into the mouse or male rat results in a characteristic orchitis from which the organism can be recovered.



FIG. 5. *Sporotrichum schencki*. Colonies four weeks old. Pennsylvania medium.

This experiment would be useful in proving the injected organisms pathogenic. As inoculation of guinea pigs is without results, its failure would help to exclude tuberculosis.

SUMMARY

The distribution and history of sporotrichosis, the usual sources from which the parasites causing the disease are derived, and the manner in which infection occurs are briefly described. The importance of recognizing the disease is emphasized, and the usually described clinical types in which it manifests itself are mentioned.

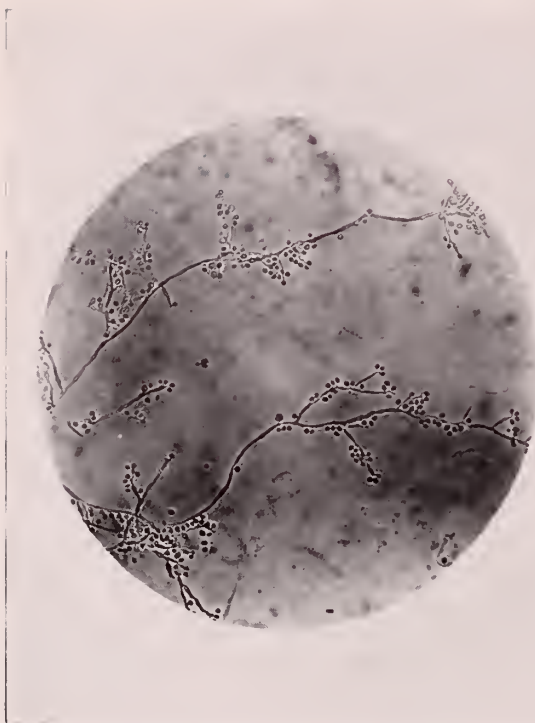


FIG. 6. *Sporotrichum schencki*. Hanging drop culture four weeks old. The clustering of conidia into groups of three or four or more is of diagnostic value.

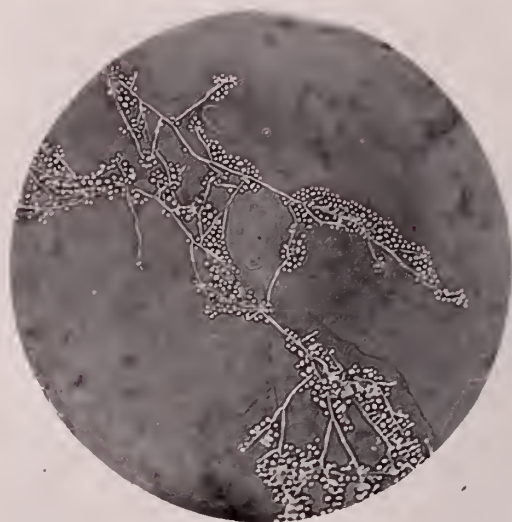


FIG. 7. *Sporotrichum schencki*. Hanging drop culture four weeks old. Masses of conidia develop around hyphae in some strains.

There follows the report of a case of sporotrichosis originating in Florida, with the clinical and histologic findings and the cultural and microscopic description of the organism isolated from one of the lesions it had caused. Treatment with iodides resulted in cure. Additional laboratory tests for sporotrichosis are discussed briefly.

BIBLIOGRAPHY

1. Schenck, B. R.: On Refractory Subcutaneous Abscesses Caused by Fungus, Possibly Related to the Sporotrichia, Johns Hopkins Hosp. Bull. **9**:286-290, 1898.
2. Hektoen and Perkins: Refractory Subcutaneous Abscesses Caused by Sporothrix Schencki; a New Pathogenic Fungus, J. Exper. Med. **5**:77 (Oct. 1) 1900.
3. de Beurmann, L.: On Sporotrichosis, Brit. M.J. **2**:289-296 (July-Dec.) 1912.
4. Gougerot, H.: Sporotrichosis, Nouvelle Pratique Dermatologique **2**:485-526, Paris, Masson and Co., 1936.
5. Foerster, H. R.: Sporotrichosis; An Occupational Dermatoses, J.A.M.A. **87**:1605-1609 (Nov. 13) 1926.
6. Jacobson, H. P.: Fungus Diseases; A Clinico-Mycological Text, Baltimore: Charles C. Thomas, 1932.
7. Lewis, G. M.: An Introduction to Medical Mycology, Chicago: The Year Book Publishers, 1939.

602 Huntington Bldg.

DISCUSSION

Dr. Lauren M. Sompayrac, Jacksonville:

I think Dr. French is reporting the first proved case of sporotrichosis in Florida. He is to be commended for his detailed study of this case. It leaves but little room for discussion.

According to Jacobson, less than 200 instances of infection have been recorded in this country, and only 4 cases in which the diagnosis was proved have been reported from New York.

I believe this disease deserves discussion in regard to the differential diagnosis inasmuch as it is frequently confused with other diseases. Culture is the only definite method of diagnosis. The clinical manifestations resemble many varieties of granuloma. I should like to stress the importance of exclusion of two of the most confusing and at the same time most serious diseases, namely, tuberculosis and syphilis.

A syphilitic chancre or gumma may be suggested when the initial lesion alone is present. Absence of regional adenopathy and negative results from dark field illumination and serologic examination aid in the diagnosis, but diagnosis by cultural means should here be definitely established.

Tuberculosis develops more slowly, lesions of this character ordinarily occurring in butchers and in patients with foci elsewhere. The pus is usually not so thick or profuse as in sporotrichosis, and the reaction to a high dilution of tuberculin is positive.

Clinical diagnosis of sporotrichosis is difficult, and such a diagnosis should always be backed by bacteriologic confirmation before the more serious mycotic diseases or other clinically similar diseases are dismissed. Dr. French cited one of the fatal mistakes, that of failure to get a culture. There have been others I am sure. The classification of this disease into four chief clinical varieties is indicative of its polymorphism.

The members of the Association are indebted to the essayist. We have had our minds refreshed on a comparatively rare disease which nevertheless should always be considered in dealing with an atypical granulomatous process. Dr. Weidman has done much to clarify the various types of mycotic infection. Only when the condition is typical is it possible to make a clinical diagnosis of sporotrichosis.

Because of its benignity and the disastrous results of a misguided therapeutic approach, this disease, which responds so well to simple medication, deserves a place in the differential diagnosis of granulomatous conditions.

Dr. A. B. Litterer, Miami:

Dr. French has thoroughly covered the subject of sporotrichosis of the skin, and little can be added. This discussion will, however, be confined to sporotrichosis in general. Although sporotrichosis of the skin and subcutaneous tissue is considered a rare disease, it is not so uncommon as to cause one to disregard its possibility when lesions of the nature described are encountered. With such a widespread source of infection by the causative microorganism, it behooves one to be on the alert in recognizing the condition for failure to do so might result in loss of occupation to the patient, much discomfort and even unnecessary surgical intervention. Since this disease is readily amenable to proper treatment, much embarrassment to the physician may be avoided if a proper diagnosis is made by the use of the simple diagnostic procedures now available.

Far less frequently observed are those cases in which the mucous membranes, eyes, bones, joints and muscles are involved. In all probability the proximity of these structures to the site elected by the organism causing this infection, namely, the skin and subcutaneous tissue, doubtless accounts for their involvement. With the fundamental information as to the nature of this disease available from the exhaustive studies of the French, it is astonishing that visceral complications are considered such a rarity. Although the lung is the most common organ attacked, only 7 cases of pulmonary involvement have been reported since 1915. The other visceral complications reported to date include those of the central nervous system, large intestine, kidney and spleen.

One is confronted with two different views when considering the distribution of the cutaneous and subcutaneous lesions in sporotrichosis, one being that the disease takes on an early septicemic character with localization in the skin and subcutaneous tissue in widely separated parts of the body, the other being that the disease is localized in the tissues surrounding the initial lesion by spreading along the lymphatic channels. Both of these forms are frequently encountered; however, the latter is more commonly observed. Many supporting observations for the septicemic nature of some of the severe types are very convincing. First, the causative organism can be cultivated from the blood stream in these cases. Secondly, the antibodies in the form of agglutinins are present in all cases regardless of the presence or absence of microorganisms in the blood stream. Thirdly, another form of immune body in the patient's serum is demonstrated by a positive complement fixation reaction.

With the present awareness of the nature of this infection, why are visceral lesions so rarely observed? There is no adequate explanation other than the rapidly developed immune body reaction of the individual and the low virulence of the microorganism. Since cutaneous sporotrichosis is now readily diagnosed and easily cured, it is highly possible that the disease does not have sufficient time to develop visceral lesions before the condition is well under control by treatment.

Dr. William M. Davis, St. Petersburg:

I want to thank Dr. French for his most comprehensive discussion of this subject.

I do not think there was any doubt about the diagnosis in the case I reported about eighteen months ago. I had occasion to take the patient before the Pinellas County Medical Society at one of its meetings. The man was a horticulturist working in a nursery, not a citrus nursery but a general nursery. He pricked the back of the middle finger of one hand with a thorn, and I saw him a few days afterward. The sore did not heal under ordinary surgical treatment. In the course of a week or ten days there were nodules in the epitrochlear region, and the infection had now spread a considerable distance up the arm. There was very little pain, and only a

slight inflammatory process was present. The infection had jumped from hand to elbow and then worked back down along the arm. I have some pictures I wish I could show you, but they do not differ from Dr. French's pictures and are not as good as his.

Having once seen a case of this type of lymphangitis, I feel that nobody would ever mistake a second case that did not heal up readily with ordinary surgical treatment.

I took cultures, but my associates and I were unable to grow them in the laboratory. I feel now that we should have given potassium iodide more promptly. As it was, however, the condition cleared up entirely within six weeks or two months.

Dr. J. Sam Turberville, Century:

I have seen several cases of sporotrichosis at intervals of from two to three years. The first one occurred twenty-five years ago or longer. I recall three of them.

As Dr. Davis has said, the clinical features are characteristic. I do not think that it is always necessary to have a culture of the blood serum before making a diagnosis. The lesions that I have encountered were all so typical, as described in the literature, that the diagnosis occurred to me immediately.

In my first case, the man had pricked his finger with a pocket knife. He had the typical chain of nodules. Some were on the index finger, and they spread in a perfect chain all the way up the arm. These nodules were painless, and there was very little discoloration. Dr. French's case showed a little more color in the lesions. The initial lesions resembled a good deal the early stages of syphilis, but were elevated whereas the lesions of syphilis remain flat and are of a dark red color.

In my second case the findings were also typical of sporotrichosis, and the diagnosis proved to be correct.

My diagnosis was not confirmed in the third case. The man wrote to me later, however, and said that the condition had promptly cleared up under treatment with potassium iodide.

The other cases I cannot recall. I am sorry that I did not make a report on them as this condition is so unusual.

Dr. French (concluding):

The rarity of reported cases of infection by fungi of the genus *Sporotrichum* is in strong contrast to the widespread occurrence of the organism in nature. Floridians are outdoor people, and exposure to the organism with consequent opportunity for infection is multiplied.

The clinical type of sporotrichosis here reported is apt to suggest the cause. Other types may exist for years without identification and be confused especially with syphilis or tuberculosis. Many patients with this disease have been falsely stigmatized as syphilitic or tubercular and have been treated for long periods of time unsuccessfully. Even these long-continued cases could often be cured with sufficient amounts of iodide.

1941 DISTRICT MEETINGS



- "A" Tallahassee, October 2
- "B" Gainesville, October 3
- "C" St. Augustine, October 4
- "F" Hollywood, October 30
- "D" Bartow, October 31
- "E" Orlando, November 1

TREATMENT OF INJURIES OF THE HAND

M. Paul Travers, M. D.

Miami Beach

Statistics pertaining to industry indicate that accidents to the hand and fingers comprise almost one half of the total number of injuries sustained. They are five times more numerous than accidents occurring to the long bones. Their cost in compensation is twice that for injuries to the long bones and approximately one third of the amount paid for all industrial injuries. A person suffering for four months from an infected compound fracture of a finger is as totally disabled as if his femur were fractured. Prevention of permanent disability from injury is especially important today, when, besides accidents in civilian life, there are those incident to military activities that must be prepared for.

Correct early treatment is of the greatest importance in the prevention of later disability. The variety of drugs, splints and methods advocated for the treatment of the injuries to the extremities often obscures the few fundamental principles that are actually important. The object of this paper is not to recapitulate the routine or complete details of treatment of any given injury, but merely to call to special attention some fundamentals frequently overlooked, with needless disability often resulting. This type of presentation is of necessity fragmentary and requires important omissions.

In approximately half of all accidents open wounds occur. In order to secure healing by first intention three essentials must be followed. The wound must be treated within six hours; the treatment must be sterilization, excision and suture; following initial treatment the injured part must be given absolute rest. If seen twelve or more hours after the injury, an open wound should not be sterilized, débrided nor sutured, as the bacteria are beyond reach and the object is not to excise but to raise the resistance of the tissue and provide drainage if necessary. Between the sixth and twelfth hour after injury the treatment depends on the condition of the wound, whether clean and sharply incised or contused, lacerated or contaminated.

It is desirable to convert all open wounds and fractures into closed ones if seen early. A wound in the first six hours is superficially contaminated, but there has been no opportunity for bacterial multiplication or invasion. Such a wound should not be shaved, washed nor irrigated. Tincture of iodine applied before débridement will sterilize the superficial areas without washing bacteria into the depths of the wound. The view that the use of iodine or other strong antiseptic renders the tissue less viable and more likely to infection is correct when applied to treatment of a wound that is to be left open; but in a wound to be sutured, it is imperative to destroy the bacteria lining it superficially. The débridement will remove the thin layer of tissue devitalized by the iodine.

In the treatment within the first six hours of compound fractures in the hand, novocain injected an inch from the wound and infiltrating its circumference, or given by brachial block, is of special value in cases in which multiple injuries and severe shock occur. There is an immediate lessening of shock due to relief of pain owing to the local anesthesia. Adrenalin should not be used locally in wounds of the fingers as it favors both dry gangrene and gangrene from the anaerobes. A general anesthetic given over a prolonged period to a patient in severe shock may terminate fatally.

As to the débridement, it is important, when possible, that not more than 1 or 2 mm. of the edge of the skin is cut away. If over 5 mm. is removed, the wound may close only with tension. All gross contamination should be removed. The sheaths alone of vessels, nerves and tendons should be débrided. The surface of bone may be scraped; bony fragments should not be removed unless completely separated. The removal of large segments of bone will result in nonunion. Infection with union is better than primary healing with nonunion; the infection will subside while the bone heals, if properly immobilized in plaster. A tourniquet should not be used during débridement since color and ability to bleed will determine which muscles require excision. Tags of fascia and crushed muscle must be removed to avoid infections and gas gangrene.

The primary suture of severed tendons should be attempted only in the cleanly incised

wound seen within six hours. In such cases the rest of the wound is débrided before the tendon is brought down into it. For a tendon suture, an additional incision is usually necessary, and good assistance is needed. It is more difficult than a routine appendectomy and is not to be undertaken lightly. In the finger, if the flexor sublimis is cut, it should never be sutured. If both the sublimis and profundis are cut, the profundis only should be sutured and the sublimis excised. Suturing them both causes adhesions and only the middle joint will move. When flexor tendons are severed between the middle palm and middle finger joint, suture and postoperative swelling cause a cicatrix in the tight tendon sheath in that area. Therefore, the whole fascial tunnel should be split laterally. Silk No. 2 or wire No. 34 should be used; the cast and not the suture should be depended upon to prevent disruption. The cast should be removed in three weeks and in four weeks full motion should be attained. If possible, denuded tendons and bone should be covered by skin flaps; if not, Theirsch grafts may be used immediately, under the plaster cast.

In lacerations with extensive contusion or devitalized areas present, tendon suture should be delayed. In such wounds, only the skin is closed except that, if divided, important nerves may be sutured. Catgut is a foreign body and only large vessels should be tied; hemostatic pressure may be used to stop small bleeders. Torn ligaments should not be sutured; they heal spontaneously. Deep sutures and drains are unnecessary invitations to infection. If a large area of tissue has been crushed and appears devitalized, the wound should not be sutured; a solid cast should be applied over a vaseline gauze dressing. For infected wounds that discharge profusely, a rubber tube drain may be inserted through the cast to, but not into, the wound. Drainage will usually cease within a few weeks if the wound has been properly immobilized.

Prophylactic chemotherapy, still in the experimental stage, should not divert attention from the need of adequate surgery and immobilization. Powdered sulfanilamide and sulfathiazole, up to 5 Gm. each, may be used locally after excision but these chemicals are of no value locally in the presence of infection

as pus inhibits their bacteriostatic action. They may be used orally, according to the surgeon's judgment as to whether infection is possible or present.

After the open fracture has been converted into a closed one, the fracture is reduced and immobilized. Setting the fracture by instrumental manipulation in the open wound is dangerous because of the further damage done to the injured exposed tissues, and bone infection is more likely. Corrections should be made only in the first few hours after the wound is sutured. Thereafter, movement favors infection. If the position of the bones is not satisfactory, it will be necessary to wait until the wound is healed and the skin is normal before undertaking further manipulation.

The sutured wound is treated without dressings when bleeding has ceased. Plaster of paris is used for immobilization, and a window is made for the wound, which is dressed for twelve hours only. A piece of Cramer's wire is looped over the hand and attached to the cast with a few turns of plaster to protect the wound and to serve as a point of traction when required. Wounds frequently weep; dressings, if continued, become moist and the skin macerated. These conditions favor infection. With an exposed wound, the escaping serum will form a crust more satisfactory for primary healing. During the initial period when infection is possible, the extremity should be raised to secure the optimum circulation and prevent edema. An abduction splint maintains proper rest and elevation. A heat lamp is helpful in maintaining a favorable temperature.

Stitches that are under some tension on account of loss of skin should not be removed for two or three weeks, to avoid separation of the wound and secondary infection.

When the danger of infection is over, the sutured wound should be covered by closing the window of the cast with felt and plaster or by applying a new solid cast before the extremity assumes a dependent posture; otherwise "window edema" will lower the vitality of the area and favor infection. The cast is retained for several weeks, the period of immobilization depending on the severity of the injury. If the cast becomes soaked with blood or develops a strong odor from discharge, this fact is no contraindication for its continuance. A solid cast

is not used initially when a hand is so severely injured that its viability is threatened; neither is it used in the presence of spreading cellulitis or possible gas gangrene. In these cases the limb must first be kept under observation in a plaster shell until the infection has been localized. A cast is removed only when there is a late elevation in temperature (above 100 F), which indicates a pocket of infection that must be drained, after which the cast is reapplied.

If an open fracture or wound is seen after twelve hours, when it is no longer good surgery to sterilize, débride or suture it, gross dirt and devitalized tissues may be excised, pockets opened and good drainage established. Uninterrupted rest is the principle then relied upon. An unpadded plaster cast should be used for immobilization, the open wound being covered with only a vaseline or a plain gauze dressing. A flat board under the hand encourages stiffness of the fingers. No antiseptics nor irrigations are indicated. A hand bath at a critical stage will spread infection because it disturbs the immobility of the part; furthermore, the dependent extremity without a cast encourages edema, which lowers resistance of the tissues.

Unwindowed and unpadded plaster casts should be left on the injured hand for a month after they are first applied, if possible. During this time the underlying fractures will heal, wounds left open will granulate in, infections in soft tissue and bone will subside and the skin will begin healing over large areas without grafting, although that procedure may be required. Infected fractures will eventually extrude any sequestrum. Infected bone should no more be curetted than should a furuncle. If a sinus persists, it should merely be probed for the foreign body or sequestrum that is there. Infection will otherwise not persist if a well fitting cast is applied for a sufficient period.

Often the treatment is exactly contrary to the requirements. The patient is given complete bed rest, but the injured area is moved constantly, soaked several times daily and irrigated with many chemicals, and the patient is taken repeatedly to the departments of physical and roentgen therapy as well as subjected to frequent, painful and disturbing dressings.

When pus is present in the hand, it must be evacuated. It is routine knowledge to competent surgeons that the spaces in the palm, chiefly the thenar and mid-palmar spaces, are deep to the flexor tendons. Were the thenar space superficial to the tendons, proper treatment of an abscess in this space would consist of making an incision at the apex of the swelling to evacuate the abscess. However, since the space is beneath the tendons, to incise at the apex of a bulge, as is usual elsewhere, would end disastrously since the tendon area would have to be cut through to get to the abscess. Thus a severely disabling process would be initiated. A lateral approach through the web between the thumb and the forefinger will drain the space below the tendons and not endanger them. Other spaces in the hand require a special approach not herein described, but it is important to remember that tendon areas must not be cut through to drain abscessed spaces.

Postoperatively, if in suppurative cases the patient continues to maintain an elevated temperature, pockets of pus should be looked for. Ethyl chloride is not a satisfactory anesthetic for this purpose since the exploration should be slow and careful. The dorsal aspect of the hand is frequently swollen. Pus is rarely present in the dorsum; swelling in this area is usually edema, and the pus is probably on the palmar aspect.

If, after an adequate incision has been made for pus anywhere in the hand, a plaster shell were always applied and the extremity put on an abduction splint for complete immobilization and elevation, many severe infections would be brought under control rapidly. It is not fully realized that immobilization and elevation are as important in the treatment of wounds of the soft tissue as they are in injury of bones or infections. They will not, of course, relieve conditions due to undrained pus, such as an overlooked tenosynovitis.

When the temperature and inflammation incident to an acute infection of the hand have subsided, motion should begin in all fingers not injured and also in the elbow and shoulder. Stiffness in the adjacent fingers, the elbow or the shoulder after injuries to the hand is usually due to delayed movement. After simple fractures, motion in all other parts should begin at once.

It might not be amiss at this time to discuss the special aspects of some war injuries. Hard bullets shot through the hand at a high velocity with small portals of entry and exit require no débridement nor suture. They need only the excision of edges, if ragged, since the wound is free of debris, and immobilization in a plaster cast for two months. If there is no wound of exit, sufficient roentgenograms must be made to locate the bullet, which is then simply removed. If the injury is produced by a soft bullet, bomb or shell fragment, the wound is usually lacerated and foreign bodies are in its base. A radical débridement is then required, followed by the application of a closed plaster cast. Tendons should never be sutured in injuries caused by war. Tendons of fingers other than the thumb, extensively damaged by shrapnel or rifle, should be amputated since the residual function does not compensate for the risk of infection and time involved in more complicated treatment. For injuries to the thumb and metacarpals, the treatment should be conservative even in severe wounds, and immobilization secured by a closed plaster cast. The fingers should never be put up in extension but in the position of best function. Fractures accompanied by burns, which are common in aviation, should be débrided and set, and the wound covered with vaseline gauze and a solid cast applied to the area. Deep burns will heal under prolonged immobilization.

Closed fractures in the hand are not frequently subjected to open operation; however, open methods for recent closed fractures are used in a few clinics. Generally, this practice is to be condemned, except in some very special instances. After surviving the initial shock of an injury, a healthy person practically never dies from the treatment of a fracture. Also, osteomyelitis and nonunion rarely occur. In one report of 35,000 cases, the period of recovery from fracture of the same bone, when treated by open operation, was twice as long and twice as expensive; also, bone infection, nonunion and the mortality rate were immeasurably greater with the open method. By proper traction almost every displacement can be corrected. If such reduction is not always perfect, the patient is usually better off with a slight anatomic alteration than with some of the complications just mentioned. Pins and

wires used for traction, placed at some distance from the injured area, are relatively safe, although not entirely without danger; they should be used only if indispensable. The great danger involved in open operation is that it is done on the injured area, which does not have a normal resistance.

Some displaced fractures in the hand require traction. The treatment in such cases is often more difficult mechanically than that of fractures involving large bones, due to the smallness of the parts, their more complicated movement and the greater tendency of their joints to stiffness. To achieve steady traction, a well fitting broad base is necessary. Metal splints with adhesive tape are not effective; they neither fit well nor hold long.

Immobilization of the hand by a plaster cast requires a plaster 6 inches wide applied dorsally from just below the elbow to the knuckles to prevent edema of the loose tissues of the dorsum. Adhesive tape may be used to bind the palm to the cast but should not interfere with the complete flexion of all uninvolved metacarpophalangeal joints. Only those fingers involved should be splinted in flexion by individual wire splints.

If the use of the normal joints is unnecessarily limited, especially in patients over forty with tendencies toward arteriosclerosis or general osteoarthritis, residual stiffness and disability are encouraged. The use of a banjo splint or any palmar device for fractured fingers is not desirable since it does not allow flexion of uninjured fingers. The use of tongue depressors for fractured fingers is not satisfactory as a position of good function is not attained.

The Böhler wire finger splint conforms to proper principles. This splint can be shaped to the palm and the flexed phalanges, then covered with plaster and finally incorporated into the cast on the palmar side by a few turns of plaster. The injured finger is put on the splint usually with its three joints flexed respectively at forty-five, ninety and forty-five degrees; the splint extends beyond the finger so that traction can be attached to it. After reduction, traction is applied when necessary by a stainless steel wire placed through the ball of the finger (not through the phalanx or nail), with a small wooden spreader, and tied to the cast, prox-

inally. Fluoroscopy or roentgen study is required at frequent intervals in the early treatment of this as well as any other part in traction. It is well to add, however, that repeated or continuous interference is a cause of nonunion, although this condition is rare in the hand.

Traction on a finger should not be used in the case of a slight displacement in the shafts of the phalanx or metacarpus, as some stiffness in the fingers will often result and thus real disability is courted where none was threatened.

A very disabling injury, if mistreated, is Bennett's fracture—dislocation of the thumb. This consists of a fracture of the base of the metacarpus on the inner side; the metacarpus itself is subluxated from the trapezium due to rupture of the triangular ligament. This injury is easily reduced but will not stay reduced in a molded cast unless there is traction on the thumb for four weeks. Neglect of this procedure weakens the entire hand. Traction is also required in phalangeal fractures when one third or more of an interphalangeal joint surface is over-riding. Some small chip fractures require excision since the function of the finger cannot be risked for the sake of union of some difficult fragment. In some sprained fingers there is an excessive reactive exudation and swelling of an interphalangeal joint. As with other injured joints, a preliminary period of immobilization is indicated, usually from one to two weeks in a position of moderate flexion. After this period, however, mistreatment may greatly prolong the difficulty. Overimmobilization for many weeks may result in some permanent stiffness; also overenthusiastic passive stretching and massage delay recovery. Consistent, regular, active exercises, done for five minutes every hour, will afford the quickest recovery possible, although it may take a few months to reduce the swelling and regain motion.

There are two common and treacherous injuries of the wrist that deserve comment inasmuch as their neglect can be the cause of severe disability to the hand. They are fracture of the carpal scaphoid and dislocation of the carpal semilunare. Fracture of the scaphoid is often thought to be a sprained wrist. When there is persistent pain in the wrist and special tenderness in the region of the anatomical snuffbox, roentgenograms are essential; spec-

ial views are necessary to show this fracture. If the first roentgenograms do not disclose the fracture and the symptoms continue, others should be made in three weeks. Some fractures may not be apparent at first.

If absolute immobility is not secured, or if the cast is removed before six weeks have elapsed, nonunion with serious consequences may result. The cast should be unpadded and the metacarpophalangeal joints left free. Plaster instead of adhesive tape should bind the hand to the dorsal splint. If the wrist can move there will be nonunion. Even old fractures will yield to prolonged immobilization. Open operation is required only when there is true nonunion, that is, sclerosis of the fractured surfaces. It is then necessary to drill through the sclerosed surface and open new vascular channels that will permit healing with immobilization. The only indication for the removal of the scaphoid is an avascular necrosis of the bone before arthritis has occurred; then, only the lower half should be removed. If arthritis of the radioscaphoid area is present, only arthrodesis of the wrist joint will eliminate painful motion.

The dislocated semilunar bone is also frequently overlooked. This dislocation can be replaced by closed methods in the first three weeks. What is required chiefly is a straight pull separating the carpus from the forearm so that sufficient space is provided in the wrist for the replacement of the carpale. Leverage is not effective nor is intermittent traction. Strong continuous traction for ten minutes is necessary. After three weeks, open operation will be required. Due to improper reduction and immobilization, injuries to the scaphoid and semilunar bones have resulted in so many failures that open operations and removal of these bones, even for recent injuries, have been advocated at one time or another. The removal of these bones always leaves a permanently weak hand and is certainly never to be considered in their early treatment.

There is a pernicious practice of removing the cast from a fracture before it is healed, for treatments of one sort or another. To attempt to remove the cast earlier in order to institute passive motion, massage or physiotherapy,

causes pain and swelling, and also delays union and the full exercise of adjacent joints.

All fractures, no matter with what complication, must have complete and continuous immobilization until united; all surrounding joints should be exercised from the first. It is not immobilization alone, but combined with disuse, that produces stiffness; therefore, if surrounding joints are constantly used, the function of an affected joint is also improved. If, in the case of a simple malleolar fracture, the foot is strapped and the patient lies in bed, functional inactivity will result, perhaps accompanied by some foot drop, swelling, general atrophy of the area and limitation of motion of all adjacent joints and muscles, lasting for a period of several months.

When an ambulatory cast is used for three weeks and adjacent joints are properly exercised there is usually a prompt recovery of function and motion. The cast allows motion of adjacent uninjured joints and thus the tendons about the joint in the cast function more than they could during the limited "passive exercises" given when an ununited bone is removed from its protective cast. A cast over an injured joint, therefore, actually can prevent stiffness if exercises of the surrounding joints are done for five minutes each hour. Exercise (active, not passive), of all adjacent joints should be persisted in, despite early discomfort; edema is an indication that exercises are needed, not the reverse, as "edema is glue."

Three thousand units of tetanus antitoxin should be given in all open wounds. For any secondary procedure, 3,000 additional units are necessary. As to gas gangrene, if all dead tissue is removed, these bacilli do not become pathogenic even though present. If devitalized tissue remains to act as anaerobic media, a dose of serum will not help much, prophylactically. The serum, however, may be used because of the seriousness of the complication.

The principles of treatment for wounds of the hand apply equally to injuries and infections of all the extremities, whether bone or soft tissue is involved.

CARDIAC ARRHYTHMIAS

J. W. Annis, M. D.

Lakeland

Cardiac arrhythmias have long been of interest to physiologists and clinicians. Osler related that an Alexandrian anatomist, Herophilus, counted the pulse with a water clock and made an elaborate analysis of its rate and rhythm as early as 300 or 400 B. C.

Taking the radial pulse is one of the oldest methods of clinical investigation. Certain disorders of cardiac rhythm are not, however, manifest in the radial pulse and need one or another of the instruments of precision for their demonstration. It is to these instruments, the sphygmograph, the polygraph and the electrocardiograph, that we owe our present knowledge of cardiac arrhythmias, the exact nature of which was not understood until the present century. They are in themselves merely manifestations of underlying disorders that should in each case be correlated with the other data and the entire clinical picture before any true estimation of their significance may be made.

This discussion includes a consideration of those anomalies producing a disturbance of the normal regularity of the heart beat and excludes disorders of the conducting mechanism. Eight forms of arrhythmia are presented: (1) sinus arrhythmia; (2) sinoauricular block; (3) nodal rhythm; (4) ventricular escape; (5) extrasystole of whatever origin; (6) auricular flutter; (7) auricular fibrillation; and (8) ventricular fibrillation.

Normally the heart muscle differs somewhat from ordinary striate muscle, chiefly in its less predominant striations. Because of the close unity of its fibers it more nearly resembles syncytium. For practical purposes there is functional continuity throughout this muscle. The special tissues concerned with the initiation and propagation of the heart beat are the sinoauricular node; the auriculoventricular node, the bundle of His with its right and left divisions and their arborization, and the terminal fibers of Purkinje.

The sinoauricular node, situated at the junction of the superior vena cava and the auricular appendix of the right atrium, extends about 2

Read before the DeSoto-Hardee-Highlands-Charlotte-Glades County Medical Society, Wauchula, February 14, 1939.

cm. down the sulcus terminalis. It has a rich arterial supply and contains nerve cells and fibers forming relays with the vagus and sympathetic nerves. Its peculiar feature is the long thin muscle fibers longitudinally striated in a plexiform arrangement that is believed to initiate the heart beat under normal circumstances. For this reason it is called the pacemaker of the heart. The nerve supply is from the right vagus.

The auriculoventricular node lies at the posterior border of the interauricular system on the right side near the mouth of the coronary sinus and is identical in structure with the sinoauricular node. It is supplied by the left vagus.

The bundle of His runs horizontally forward from this node to the anterior part of the membranous septum where it forks. The left branch penetrates the septum just below the aortic valve and enters the subendocardial space of the left ventricle. The band on the right side goes down into the moderator band and papillary muscles. Both branches are continuous with arborization of fibers penetrating the ventricular wall.

The cardiac impulse normally arising in the sinoauricular node at a rate of from 100 to 120 is inhibited by vagal tone to produce a rate of from about 70 to 80. The impulse spreads uniformly through the auricles as a ripple over water, but not to the ventricular musculature. The auriculoventricular node is affected by the impulse and transmits it through the bundle of His and its ramifications to the musculature of each ventricle separately. The bundle is the sole connecting strand between the auricles and ventricles. This normal sequence of events produces the normal electrocardiogram. While the impulse normally starts in the sinoauricular node, all parts of the mechanism including the cardiac muscle itself may originate it, in the event either of the depression of the more sensitive normal pacemaker or the excitation of the ectopic focus.

SINUS ARRHYTHMIA consists in a regular waxing and waning of the pulse rate due to a regular cyclic change in vagal tone. It is usually associated with respiration and in this instance designated respiratory arrhythmia. Presumably it is due to a reflex inhibition of the cardiac vagal tone from impulses derived from the pulmonary branch of the vagus during in-

spiration and to reflex stimulation during expiration. It offers little difficulty in diagnosis, but because it occurs usually in children and young adults, it has been erroneously associated with meningitis. Its importance lies in differentiating it from a serious disorder, thus avoiding unnecessary treatment or an alarming prognosis. The type unassociated with respiration occurs in cycles of from 10 to 15 seconds. It may be due to heightened vagal tone and occurs occasionally after the administration of digitalis. Usually deep breathing produces a typical respiratory arrhythmia. Anything raising the heart rate, such as exercise, fever, or the action of atropine, causes the arrhythmia to disappear. It rarely occurs when the pulse rate is over 100. The electrocardiogram is normal except that the tracing indicates rhythmic waxing and waning of the rate. Usually this form of arrhythmia occurs only in persons with healthy hearts and requires no treatment.

Sinus tachycardia is characterized by a regular pulse rate above 85 and has no significance other than that of drawing the clinician's attention to the underlying cause, which may be fever, hyperthyroidism, exercise, reaction to drugs or emotion. The onset and termination are gradual, and symptoms as such are lacking. Except when caused by fever or hyperthyroidism the excessive rapidity subsides during sleep. The arrhythmia persists for varying lengths of time dependent on the cause, and the electrocardiogram is normal except for evidence of the increase in rate.

Sinus bradycardia, with a regular pulse rate varying between 50 and 60 approximately, is of sinus origin, due either to vagal tone or to direct toxic effect on the sinoauricular node. It is associated with fasting, asphyxia, certain acute fevers such as influenza and typhoid reaction to drugs, notably digitalis, and exhaustion. It may be differentiated from other arrhythmias by means of atropine. In persons with excessive vagal tone the rate slows and the blood pressure drops, causing cerebral anemia and the syncope of the ordinary fainting spell. Emotion may produce this abnormal slowness of the heart beat; pressure on the carotid sinus may also cause it temporarily. It requires no treatment in itself although the underlying cause may. The electrocardiogram is essentially normal though the P wave may be flut-

tered, notched or inverted, owing to the origin of the impulse in the lower part of the sinoauricular node.

SINUS ARREST OR SINOAURICULAR BLOCK is rare and usually transitory. It is due nearly always to vagal effects, disappears when atropine is administered and usually occurs in adults, having little if any clinical significance. It consists of a complete cardiac asystole or dropped beat and occasionally 1:2 and 1:3 beats. The interval is slightly less than that of two normal beats, and the electrocardiogram aside from demonstrating the asystole is normal. The lack of impulse initiation in the sinus node, a block in the node, and an inability of the auricle to contract are etiologic factors. The action of digitalis and quinidine causes this arrhythmia; the role of aconite, magnesium sulphate and nicotine remains problematic. Some hearts, especially those of athletes, have a rate of from 30 to 40 that is suddenly almost doubled by exercise as a result of this phenomenon, a partial block being present to produce pronounced bradycardia.

NODAL RHYTHM is a disorder in which the pacemaker is in the auriculoventricular node, which sends out regular impulses to both auricles and ventricles. The electrocardiogram shows a normal QRS complex and also an inverted P wave, since it arises at an abnormal focus. If the origin is high in the node, the P wave precedes the QRS complex by a very short PR interval since the auricles receive their stimulation slightly before the ventricles. If the origin is near the center of the node, both auricles and ventricles contract simultaneously, and the P wave is lost in the QRS complex. If the base of the node gives rise to the impulse, the normal QRS complex is followed by an inverted P wave. The pulse rate is usually slow, ranging from 40 to 50, but may be considerably more rapid. This type of arrhythmia is observed in persons with apparently normal hearts and may result from purely neurogenic influences affecting the vagus. On the other hand, it occurs in heart disease, but is not characteristic of any particular cardiopathy. It is a constant finding when death is taking place and uniformly ushers in prelethal bradycardia. Such a condition results from depression of the normal pacemaker or excitation of the auriculoventricular node. In the intermittent stage

migratory rhythm may occur as the pacemaker varies from one level to another between the sinoauricular and auriculoventricular nodes. Since there is no definite clinical significance in nodal rhythm, treatment is indicated by the underlying pathologic conditions that may be present.

VENTRICULAR ESCAPE is closely allied to nodal rhythm. In this condition the sinoauricular rate is so retarded that the auriculoventricular node, refusing to wait longer, sends an anticipatory impulse to the ventricles. The ventricles in this instance escape from the control of the sinoauricular node because of the development of autonomy in the auriculoventricular node. Two forms are observed; one is due to depression of the sinoauricular node and the other to excitation of the auriculoventricular node. Their recognition depends on the rate of the sinoauricular pacemaker and the rate of the ventricular pacemaker escaping. The ventricular complex remains unaltered. The condition is distinguished from nodal rhythm only by the electrocardiogram. In ventricular escape the heart is under the control of two pacemakers, both the sinoauricular and the auriculoventricular. In nodal rhythm it is under the latter only.

EXTRASYSTOLE OR PREMATURE BEAT, the arrhythmia occurring most frequently, was first accurately described by MacKenzie¹ in 1902. It may be of auricular, nodal or ventricular origin and is in consequence correspondingly difficult of interpretation in electrocardiograms.

Premature beats occur at all ages, but especially in later adult life. They are twice as common in men as in women, and it is probable that the majority of people beyond middle life have them at one time or another. They are often associated with cardiac lesions of various sorts and myocardial damage, but occur most often when the heart is otherwise normal. They also frequently accompany infection. Fatigue and slowing of the heart rate predispose to extrasystoles, and, conversely, raising the rate with exercise and by administering atropine corrects this abnormality. The condition may be produced also by stimulation or reflex stimulation of the vagus owing to flatulence (French), excessive smoking and like causes.

The auricular extrasystoles arise from an ectopic focus in the auricle at some time previous to the normal impulse and therefore produce an abnormal P wave, which is inverted, and a normal ventricular complex since the impulse follows the only possible route between the auricle and ventricle. The nodal group shows all the characteristics of nodal rhythm with a normal QRS complex and a usually inverted P wave which may shortly precede, coincide with or follow the ventricular complex. Ventricular premature contractions arise from an ectopic focus in the ventricle itself and show therefore a bizarre ventricular complex in the electrocardiogram. It is heightened, widened and premature, and it usually is diphasic, slurring and notched, the degree of abnormality depending on the distance of the point of origin from the bundle. Since no auricular contraction precedes it there, it has no P wave of its own, but the normal auricular rhythm remains undisturbed, and a dominant rhythm is maintained. If it is but slightly premature, it may blend with the normal beat, and, if earlier, it will bury the normal P wave. The normal auricular impulse reaches the ventricle during its refractory period and consequently causes no reaction. The T wave is large, peaked, and always opposite the ventricular complex.

The pauses following the auricular and nodal extrasystoles vary in length. In the auricular and usually in the nodal type they are longer than an ordinary pause, but not equal to a double cycle; in the latter form occasionally, however, if the impulse is very low in the node, a compensatory pause will ensue. In ventricular extrasystoles the pause is compensatory; that is, the time from the preceding to the succeeding contraction is equal to exactly two beats because the auricular rhythm is undisturbed. There is, then, a dominant rhythm, and, if a chronograph were set to coincide with the normal rate and a ventricular premature contraction then interposed, the succeeding normal beats would still coincide with the chronograph. This compensatory pause is not characteristic of the other types, and the length of the pause is the chief method of clinical differentiation. Actually this differentiation may be difficult or impossible although a sharp venous impulse and loud first heart sound aid in the event that the auricle and ventricle contract together. The

differentiation is, however, of no clinical significance.

The so-called interpolated extrasystoles are of ventricular origin, occurring early in diastole in a slowly beating heart between two normal beats and ending before the normal auricular impulse arrives. Hence it does not replace another beat nor disturb the dominant rhythm and is in the true sense an extrasystole, not a premature contraction. In the electrocardiogram its appearance is identical with that of a premature contraction of ventricular origin.

The clinical signs of extrasystole include first cardiac irregularity owing to the premature beat. If the beat has sufficient force to raise the aortic valve, there will be the two normal heart tones and the radial impulse. If not, only the first tone will be present, and the so-called pulse deficit or discrepancy between the apical and radial impulses will obtain. The rate may be very irregular or only slightly so, depending on the number of extrasystoles present. Their frequency varies from an occasional to a regular occurrence every other beat, thus producing a bigeminal pulse. Differentiation between auricular fibrillation and extrasystole may usually be easily made by raising the rate with mild exercise or by administering amyl nitrite, thus restoring a regular rhythm in the case of extrasystole and accentuating the irregularity in auricular fibrillation. On resting, the irregularity of extrasystolic origin tends to recur.

The symptoms of premature contractions are often lacking. On the other hand they commonly cause so-called palpitation, especially in nervous persons, and by calling attention to the heart may cause much anxiety. Usually the beat itself is unnoticed and the long pause that follows awakens a feeling of uneasiness or emptiness in the chest. The succeeding beat then seems a shock to the chest wall. If the beats are numerous and consciousness of them is full, faintness, pallor, sweating and coldness of the extremities may follow, occasionally causing great distress. Fatigue and emotion predispose to the more serious symptoms.

The prognosis of the condition itself is, of course, excellent, but it is frequently associated with severe underlying disease. It is perhaps best described by Lewis,³ who compares the prognosis in these cases with that in cases of

epilepsy in which the patients have scars on their tongues. It is true that epileptics with scarred tongues have a more unfavorable prognosis than those without, but no one suggests that the scars as such influence the prognosis. So it is with extrasystoles. Their incidence is greater in persons with heart disease than in normal individuals; yet the presence or absence of this arrhythmia does not affect the prognosis in either case.

Specific treatment is usually unnecessary. Any underlying disease should be treated, and general healthful habits should be established. In severe cases, when symptoms are pronounced, quinidine, given in the amount of $\frac{2}{3}$ grain twice or three times daily over short periods, often produces excellent results. Digitalis is contraindicated as a direct remedial measure, but may be used for any concomitant disease. Bromides often provide satisfactory symptomatic relief.

AURICULAR FLUTTER is characterized by an abnormal rhythm in which rapid, small, regular contractions replace the normal auricular systole. A partial block is present, the ventricle responding to every second, third or fourth beat. This arrhythmia occurs much less frequently than fibrillation, Blackford and Willius⁵ estimating the proportion at 16 to 63. The impulse consists of a single continuous wave traveling in a circle usually between the superior and inferior vena cavae and, unlike the normal impulse, not radiating. The known limits of rate are 150 to 360, usually 260 to 320. Since the wave is always circulating, there is no true diastole of the auricle. Each circuit is an impulse which is relayed to the ventricle. There is, however, an almost invariable association with heart block, the ventricular rate varying from 32, which indicates complete heart block, to an occasional 320 or a 1:1 ratio. Generally, however, it is a 2:1 block, that is, a rate of 130 to 160.

The etiology is in no way specific. This arrhythmia occurs at all ages, although chiefly from 40 to 60, and, therefore, is often associated with arteriosclerotic conditions and degeneration of myocardial lesions. It is likewise associated with infection of the upper part of the respiratory tract, and Willius and Blackford⁵ reported 4 cases in which it was associated

with exophthalmic goiter. There is, also, a frequent association with mitral disease.

Clinical diagnosis is often difficult. In cases in which the block shifts from 1:2, 1:3 and 1:4 to normal the pulse rate may be very irregular, but it is usually regular and rapid though slightly less than that of paroxysmal tachycardia. The two may have the same abrupt onset and termination, but flutter usually persists for weeks or months whereas paroxysmal tachycardia continues for minutes, hours or days, rarely over a week. The time element, however, is not conclusive, and possibly both are relatively little affected by exercise, posture and like considerations. Perhaps the greatest clinical help is pressure on the carotid sinus, which increases the block in flutter, usually halving the beat, and when the pressure is reduced, the ventricular rhythm goes back to exactly what it was before. This pressure, if it produces any effect in paroxysmal tachycardia, terminates the paroxysm completely.

Theoretically, in some patients at least, venous pulsation may be observed in the jugular vein corresponding to auricular contractions, and then of course diagnosis is established. If, as is common in paroxysmal tachycardia, the rate is 180 or over for a prolonged period, flutter may be excluded as auricular rates of over 360 are unknown and the simplest block would halve this rate. The electrocardiogram offers conclusive proof. Flutter occasionally alternates with fibrillations, producing a complex picture.

The symptoms vary considerably. In short paroxysms there may be sudden nervousness, palpitation, pallor, sweating, a sense of constriction or pain in the chest, weakness, fatigue, nausea and vomiting; if failure supervenes, overshadowing the classical signs in the presence of a large tender liver, rales, cardiac dilatation and bloody sputum may be observed. In contrast, there may be little or no effect from the disturbance, depending chiefly on the state of the cardiac muscle, which is often surprisingly good. Long persistent attacks may produce no symptoms in some patients save moderate exhaustion and fatigue on exertion, and, while their activities are somewhat curtailed, failure does not supervene even after years of continuous flutter.

Occasionally the ventricles respond to each auricular contraction, attaining a rate of around 300 and placing life in immediate jeopardy. Symptoms are profound, and consciousness usually is lost. Such attacks, if survived, are necessarily fleeting. The prognosis is based on the strength of the heart muscle and the burden it has to bear. Also of utmost importance is the response to treatment since most cases are amenable to specific therapy.

Two drugs are used in the control of flutter. Lewis² obtained much better results with the use of digitalis by increasing the block and slowing the ventricular rate to about 50, meanwhile producing fibrillations of the auricles. The drug is then withdrawn, and the rhythm often returns to normal. Willius⁵ reported much better results if complete block could be obtained before withdrawing digitalis. Many American writers have found digitalis therapy relatively unsuccessful and prefer the use of quinidine to break the flutter by increasing the refractory period; some like to combine the two, digitalizing the patient first and producing fibrillation, then giving quinidine. The patient's reaction to this drug should always be tested first by giving a very small dose and it should be given in gradually increasing doses under careful supervision as untoward effects are frequent.

The electrocardiogram of flutter is characteristic. P waves are absent, being replaced by F waves which are constant in rate, form and amplitude, and may be either normal or inverted. They follow each other rapidly and are seen best in leads II and III. The QRS complex is normal. The T wave is usually not seen since it is buried in the F waves. The cycles are regular except in the instance of impure flutter when the cycles vary in length and a fibrillation is simulated.

AURICULAR FIBRILLATION has a characteristic pulse irregularity, distinguished in 1903 by Hering,² who called it *pulsus irregularis perpetuus*, but he did not comprehend the entire clinical picture as did MacKenzie¹ in 1906. It was not till 1909, however, that Lewis² demonstrated the physiologic mechanism producing the totally irregular pulse. Auricular fibrillation continues to be the most frequent significant form of arrhythmia, comprising well over 50 per cent of hospital cases of arrhythmia.

In this condition the auricles are in a constant state of diastole and no longer contract, but undergo only very rapid incoordinated fibrillary twitching. They lose their pumplike action and act only as a reservoir. Two chief theories are advanced to explain this behavior. First, in that of Lewis it is assumed that a circular movement is present as in flutter, but with a more sinuous and varying pathologic change; second, the German theory holds that it is due to multiple foci of impulse formation in the auricular wall. This, however, is purely an academic matter and does not affect the clinical aspect of the condition. It is known that the impulses which range between 450 and 1,000 do not originate in the sinoauricular node. Due to the inadequacy of these rapid stimuli only a few go through the auriculoventricular bundle. There results a rapid totally irregular ventricular rate with many ineffectual ventricular beats that fail to open the aortic valve and therefore bring about a pulse deficit. The condition may be permanent or transitory and in the latter condition is due to (1) an acute infectious disease such as rheumatic fever, typhoid, diphtheria or pneumonia, (2) surgical anesthesia, (3) the action of digitalis, (4) the paroxysms associated with hypertension in older persons, and (5) such causes as emotional stress, exophthalmic goiter and the immoderate use of tobacco or alcohol. Usually this type disappears as the cause is removed, or the action of the heart may be restored to normal with quinidine in those cases in which there is little or no cardiac damage.

Smith⁴ made a comprehensive study of the etiologic factors in over 1,000 cases and reported that hypertensive heart disease and coronary disease combined formed the largest group, comprising 33.9 per cent of diseases with which this type of arrhythmia is associated. Hyperthyroidism, including toxic adenomatous and exophthalmic goiter, came next, being present in 32 per cent of the cases. Mitral stenosis with rheumatic endocarditis, forming the third group in size, was the largest single factor, as it occurred in 22 per cent of the cases in his series. Various other forms of heart disease were present in the remaining 12 per cent. Fibrillation was noted much more frequently in toxic adenomas than in exophthalmic goiter, owing largely, this author concluded, to the

longer duration of the hyperthyroidism as well as to the average increase in age of 10 years in the patients of the former group. Among consecutive cases of diseases known to cause fibrillation, mitral stenosis on a rheumatic basis was most frequently present.

Auricular fibrillation gives rise to two groups of phenomena, one dependent on the actual paralysis of the auricle, the other on the disordered ventricular rate. The first of these causes the variations in murmurs in mitral stenosis. The presystolic murmur does not always vanish, but, if long and harsh, persists in an altered time relationship. Developments depend, however, upon the nature of the murmur, the rate of the heart and other factors. The second group pertains to the ventricular disorder, which provides the clinical recognition. The total irregularity in a rate over 120 is nearly diagnostic, and when signs of heart failure are present, the diagnosis becomes practically certain. Typically then, there is no rhyme nor reason to the rate; the force of the beats varies greatly and bears no relation to the preceding diastole. The heart sounds bear out this diagnosis and vary from first and second sounds as the beat fails or succeeds in opening the aortic valve.

In distinguishing auricular fibrillation from other conditions such as extrasystole, sinus arrhythmia and partial block the mere acceleration of the rate by exercise or the administration of amyl nitrite usually suffices. In the other arrhythmias the increase causes regularity but in fibrillation the converse is true for the faster the rate the greater the irregularity. The total lack of any dominant rhythm and the absolute irregularity also aid. The persistence of irregularity in fibrillation is important as it continues usually until death whereas other irregularities are transitory.

The symptoms vary with the underlying cause. Those caused by the fibrillation itself may be absent or they may consist of breathlessness, exhaustion, palpitation, pallor, sweating and faintness. The auricular paralysis probably produces no appreciable effect on the circulation, but the ventricular disorder may cause varying degrees of cardiac embarrassment or failure.

The prognosis likewise varies with the etiologic factor, but fibrillation is significant as the

chief or only sign of myocardial damage and itself imposes by its fast, irregular rate an added burden to an already damaged muscle. The most illuminating data in this respect are those presented by Willis⁹ in an analysis of 500 cases, from which he concluded that "the mortality attending auricular fibrillation doubles and in some groups trebles that occurring in similar types of heart disease not complicated by this type of arrhythmia."

Treatment depends primarily upon the cause and the degree of heart disease present. In cases of short duration with little cardiac damage it is well to attempt restoration of rhythm by digitalis or quinidine, the latter being more efficacious. When a case is of long standing or serious cardiac disease is present, treatment should be directed toward slowing the ventricular rate to normal by means of digitalis and allowing the auricles to continue the fibrillation as it probably does not alter the prognosis and causes no especial symptoms. In this connection it is well to remember two things: (1) There is a definitely increased incidence of thrombosis when auricular fibrillation continues over any considerable period of time, but no increase in the occurrence of infarction or emboli; (2) There is a definite relationship between the establishment of normal rhythm and the appearance of infarction and emboli, and the lung and brain.

The electrocardiographic changes are three in number. No two cycles are the same length. The P wave is absent and replaced by small wavelets of varying size and shape. Frequent variations occur in the amplitude of the R wave.

VENTRICULAR FIBRILLATION has been until recently and perhaps still is considered a matter of academic interest, being regarded as a terminal event. Schwartz,² however, reported several cases in the past two years in which patients were observed after a long period of time who had been subject to attacks of syncope, transitory and recurrent in nature, and accompanied by an absence of heart sounds and pulse beats. The electrocardiogram in these patients before and during the syncope showed consistently a definite series of events, beginning with a normal sinus rhythm becoming rapid (150) and followed by occasional extrasystoles that occurred with increasing frequency till bigeminy was produced; then in unpredictable fashion

groups of two or more recurrent and superimposed aberrant ventricular oscillations followed, coinciding with the attack. Apparently there are two foci in control of the heart as in ventricular escape, the sinoauricular and auriculoventricular nodes, with the PR intervals varying in lengths. These ventricular oscillations or fibrillations, if they last from eight to ten seconds, cause pallor and fainting. After from twenty to forty seconds they cause unconsciousness, and if they continue for more than forty seconds, there ensues the typical Stokes-Adams syndrome, convulsions with cyanosis, apnea and incontinence. In the electrocardiogram there is a wide coarse movement of the base line with no regular QRS complexes.

Further carefully controlled studies of two patients with similar conditions in whom auriculoventricular dissociation and superimposed syncopal attacks of the type described were present indicate that quinine and quinidine, once advocated for the treatment of this condition, actually cause the seizures in susceptible patients and, therefore, are definitely contraindicated. There is, however, no explanation of their action.

REFERENCES

1. Mackenzie, J.: The Extrasystole, chap. 27, Diseases of the Heart, ed. 3, London, 1913.
2. White, P. D.: Heart Disease, ed. 2, New York, Macmillan, 1937.
3. Lewis, T.: Diseases of the Heart, New York, Macmillan, 1933.
4. Smith, H.: Study of Incidence of Auricular Fibrillation, Minnesota Med. 15: 403-406 (June) 1932.
5. Willius, F. A., Mayo Clinic: Personal communication.

P. O. Box 1021

A REVIEW OF SOME OF THE DRUGS COMMONLY USED IN UROLOGY

Alvin L. Mills, M. D.
St. Petersburg

It has been said that in urology medicine and surgery are inseparable. It is, however, not the purpose of this paper to deal with the surgical aspect of this subject.

Water, with its kinship to urine, was known and advocated by the ancients as one of the best remedies for disease of the kidneys, and niter, sulphate of copper and alum were in use a thousand years before Hippocrates. Apothecaries originated with the Arabs¹ and were known among their people as sandalini be-

cause of their common use of sandalwood oil. This drug was also a favorite among the early Hindus.

Prout in 1826 advised treatment with hyoscyamus and uva ursi for inflammation of the bladder and with opium, mineral acids and animal foods for phosphatic calculi of the urinary tract. In 1855 Glass advised the use of sulfurated linseed oil with oil of turpentine, known as Haarlem oil, and tincture of poke berries. Opium was used freely in those days, principally as opium suppositories.

The discovery in 1849 of the bacillus causing anthrax introduced a new era in medicine. During the next fifty years most of the organisms now known to produce disease were discovered. The problem of chemotherapy then began to take form. As yet no single known bactericide, when taken by mouth, will destroy all forms of bacteria in the urinary tract. A number of drugs, however, when properly used, are curative or decidedly beneficial.

Alkalinization is useful in relieving some of the symptoms of acute cystitis and pyelonephritis, especially when combined with the administration of hyoscyamus, paregoric and sandalwood oil. The practice of changing the reaction of the urine from acid to alkaline, or vice versa, has no value except for the sedation mentioned.

Copaiba, cubeb and uva ursi were in the past used extensively in inflammatory conditions of the urinary tract. They tend to produce gastrointestinal irritation. Sandalwood oil is still extensively employed. Ducoudray¹ in 1900 drew attention to the fact that dependable results of its use are due to the inconstancy of its composition, since it has not only been produced from widely different varieties of sandalwood but has also been subjected to extensive adulteration with cheaper and worthless oils. Winternitz² in 1901 demonstrated that the use of sandalwood oil promptly inhibits the formation of an exudate in an artificially produced pleurisy and promotes its rapid absorption, thus showing the beneficial effect on membranes in general.

Methylene blue is the best known of the group of diphenylamine dyes. It was first used as a urinary antiseptic by Einhorn in 1891. Hinman³ pointed out in 1915 that methylene blue is not an individual chemical

¹Read before the Fourth Annual Meeting of the Southwest Medical District held in Dunedin, October 31, 1940.

substance for it often undergoes decomposition in its passage from the blood to the urine, appearing in the urine in the form of leukoderivatives or chromogens, which are mostly non-bacteriostatic; this decomposition may also occur as bacterial activity. Thus *Escherichia coli* decolorized a 1:1,000 solution, showing an imperfect antiseptis, he observed, while the staphylococcus was inhibited in a dilution of 1:150,000. This author, therefore, considered methylene blue of some value in staphylococcal infection of the kidney and bladder, but worthless in urethritis. Lowsley employed it in tuberculosis of the bladder.

Acridiflavine, discovered in 1917, proved to be too irritating to be of much benefit. It was soon changed to a neutral flavine which allowed a higher concentration. Its action is more pronounced when the urine is alkaline. Hence, to promote efficiency an alkali should be prescribed with the drug. It is of no value in gonorrheal infection. Its principal usefulness is in infections of the kidney and bladder.

Pyridium, serenium, mallophone, neotropin, niazo and ambazin are proprietary urinary antiseptics similar in composition and action. They have a soothing effect on the inflamed mucous membranes and are said to penetrate the tissues. They have a bactericidal effect on the *Esch. coli*, staphylococci, streptococci and gonococci, which tends to retard the growth of some strains of these organisms. They are used in infections of the entire urinary tract, and, to be effective, should be given over a considerable period of time.

Hexylresorcinol, introduced to the profession in 1924 under the trade name of caprokol, is a product of synthetic chemistry. It is stable, nontoxic and nonirritating and is bactericidal to some strains of *Staphylococcus albus* and *aureus* and *Bacillus pyocyaneus*. Its most effective use is in soothing the inflamed mucous membrane in an alkaline cystitis, in which a more beneficial antiseptic could not be used.⁴ Clinical evidence indicates that caprokol is a better coccicide than bacillicide.

Mercurochrome, administered intravenously or by mouth in enteric pills, has not proved itself of value as a urinary antiseptic. It often produces an acute nephritis and colitis. These findings were corroborated by autopsy on 50 patients at Bellevue Hospital, reported by Campbell.⁴

Neoarsphenamine is used specifically for resistant coccal infections. The usual dose is from 0.2 to 0.4 Gm. given intravenously at intervals of from three to five days.

Methenamine, sold under the trade names of urotropine, aminoform, formamin, formin, cystamin, cystogen, urisol and uritone, depends for its action on the liberation of formaldehyde and is one of the best known antiseptics. There are several factors worthy of notice pertaining to the use of this drug. The larger the dose the higher will be the percentage of concentration on excretion. Medium doses are of little use for antiseptis of the kidney since there is no time for the formaldehyde to form before the drug is excreted. Hinman³ called attention to the fact that the dilution of the drug on its excretion is also a factor influencing the amount subsequently converted. Thus, a polyuria would largely offset the advantage of large doses. The alkalinity of urine due to the presence of bacteria which decompose urea, can, as a rule, not be changed by administering acid producing drugs. Levy and Strauss⁵ demonstrated that to kill the colon bacillus a concentration of 1:5,000 is necessary and that a dose of 7 grains three times a day would not liberate formaldehyde in concentration strong enough to kill bacteria other than those of typhoid. After using hexylresorcinol and pyridium extensively since their inception in 1924 and 1926 respectively, Campbell⁶ concluded in 1931 that methenamine in large doses is the most uniformly efficacious antiseptic available at the present time. The average toxic dose for the average adult is 180 grains. He employed methenamine in doses of from 50 to 100 grains daily. Hematuria frequently develops from vesical irritation, which promptly subsides when the drug is discontinued. Davis and Sharpe⁶ in 1932 stated that methenamine is incomparably more efficient than either pyridium or hexylresorcinol in causing a normal person to secrete urine that is antiseptic against both the colon bacillus and the staphylococcus. Helmholz⁷ in 1932 reported a series of experiments demonstrating that it is necessary to have a pH of 5.0 or less for maximum sterilization when methenamine is used. The old idea that a drug capable of acidifying should be given separately proved fallacious. This drug is commonly given with an acid.

It has long been known that most of the organisms found in the urinary tract thrive

in an alkaline medium and that a highly acidified urine tends to be bacteriostatic. These facts led Clark⁸ and Helmholtz⁷ in 1932 to advocate the use of a ketogenic diet designed to produce a state of ketosis, the hydrogen ion concentration being kept at 5.3 or less since most organisms are not inhibited in their growth until a pH of 5.0 is reached. The ketogenic diet has been used most successfully with children, perhaps because the adult liver has greater capacity for storing glycogen. As a rule elderly patients are prone to gastrointestinal upsets, and a ketogenic diet for these patients is impractical. In 1935 Rosenheim⁹ discovered that mandelic acid would do in a direct way what had been done with a ketogenic diet. It is the one drug in the physician's armamentarium that will destroy the *Streptococcus faecalis*. It has also proved effective in infections caused by *Staph. aureus* and the colon bacillus. Since reports indicate that it may irritate the kidney, the urine should be examined frequently for blood and casts when this drug is prescribed. It is contraindicated in hypertension.

The most important recent advance in chemotherapy is the use of the azo dyes of the amino acid group. The first experimentation was with prontosil, as reported by Domagk¹⁰ in 1935, although there is historical evidence that it had been in the hands of certain clinicians in the Rhineland since 1933. These experiments were soon confirmed by French and English workers, and the drug was first used in this country in 1935. Early observers include Long and Bliss,¹¹ Helmholtz,¹² Dees and Colston¹³ and Bohlman.

Prontosil, the original effective dye substance, was soon supplemented by other salts, neoprontosil, sulfapyridine and, recently, sulfathiazole. Sulfanilamide is the active principle of the prontosils and from 60 to 75 per cent of ingested prontosil is reduced in the body and excreted in the form of sulfanilamide. Knowledge of the fate of the prontosils in the human body lags behind that which is known of sulfanilamide. No theory has yet been evolved which adequately explains the mode of action of these sulfur benzene derivatives. For the time being one must be content with the simple conception that they inhibit the growth of all susceptible microorganisms in the body. Efforts are being made continually to find a fuller explanation.

Sulfanilamide is of value in eradicating infection caused by almost all of the usual organisms.¹⁴ *Esch. coli*, *Aerobacter aerogenes*, *Salmonella*, *Shigella*, *Streptococcus hemolyticus* and the gonococcus react most favorably. Infections caused by the proteus bacillus, the most severe urea splitting organism, respond favorably to sulfanilamide, but a stronger concentration in the urine is required than for most of the other organisms. Ammonium chloride should never be given in an effort to acidify the urine in the presence of an infection caused by proteus organisms, since it supplies additional urea to the proteus bacillus for the liberation of ammonia, thereby encouraging the precipitation of urinary salts.¹⁵ The response of staphylococcal infections to sulfanilamide is only fair. *Str. faecalis* is immune to it but, according to Helmholtz,¹⁶ responds favorably to sulfamethylthiazol. This drug, however, produced peripheral neuritis in a large percentage of the cases in which it was employed, and its use was soon discontinued. It was not made available to the profession. *Staph. aureus* is said to be susceptible to the action of sulfathiazole. According to Lowsley and Forsythe,¹⁷ sulfapyridine does not appear to have a place in the field of urinary antiseptics.

Urinary infections in children respond well to sulfanilamide therapy.¹⁸ This response is probably due to the fact that in them obstructive conditions such as calculi and new growths occur less frequently than in adults, and also to the fact that *Str. faecalis*, which is known to resist sulfanilamide, is most often absent. It is important to note that fluids are not restricted in treating children because of the ease with which dehydration and acidosis develop, especially in the infant. To compensate for the relatively great fluid intake, the amount given by mouth is large as compared to the dose for adults.

Sulfanilamide can be used advantageously in urinary infections in pregnancy. Herrold¹⁹ in 1937 first reported that sulfanilamide is secreted in the prostatic fluid and that therapy with this drug brings about varying degrees of improvement in patients suffering from chronic prostatitis. His work has since been confirmed by many observers.

The common toxic manifestations of sulfanilamide therapy are dizziness and drug rashes, which may take any form. Photo-

sensitivity of the skin seems to be a factor in their production. Drug fever may occur at any time from the first to the thirtieth day, but is usually seen between the fifth and ninth day. It may be a remitting fever, a steadily mounting fever, or a low continuous fever. Since one expects the temperature of adequately treated patients to be normal the third day, the occurrence of fever when all clinical signs point toward a favorable termination of the disease, should immediately lead one to suspect that the rise in temperature is due to the drug. Headache and general malaise are often present during the period of therapy with the drug.

Among the toxic manifestations occurring less often are hepatitis, characterized by jaundice with anemia, leukopenia, granulocytopenia, acute agranulocytosis, acute hemolytic anemia, pupura hemorrhagica, pain in the joints, which may be mistaken for that of gonorrheal arthritis in the presence of a gonococcic infection, and hematuria, which is more frequent when sulfapyridine and sulfathiazole are employed. The hematuria is due to the deposition of acetylsulfapyridine or acetylsulfathiazole crystals in the tubules of the kidney, and on occasion, to the blocking of the renal pelvis by calculi composed of these substances. Hyperleukocytosis, occurring only when acute hemolytic anemia is present, represents an abnormal response of the bone marrow to a hurried call made on it by the rapidly developing anemia. All of the severe toxic reactions, and to a degree, the minor manifestations, call for an immediate discontinuance of the drug, the forcing of fluids and other appropriate measures.

In the early days of therapy with sulfanilamide it was thought unwise to employ other drug medication. However, accumulated data seem to prove that there is no contraindication to the administration of aspirin, phenobarbital, codeine, morphine, digitalis and arsphenamine when necessary in a given case. Certain of the saline laxatives containing sulfur are, however, still prohibited.

The dosage of sulfanilamide¹¹ and its compounds varies according to the severity of the disease, the amount of fluids ingested and the degree of kidney function. A simple dictum is never to give more than 1 Gm. of the drug daily for each 10 per cent of total phenolsul-

fophthalein function. Carey suggested a dosage of 0.1 Gm. for each pound of body weight every 24 hours for infants, and half this dosage for children from 10 to 12 years old.

No single drug as yet discovered is an ideal antiseptic. There are individual idiosyncrasies to various drugs which necessitate a change of therapy if administration of a given drug does not effect appreciable results after a week's trial.

CONCLUSION

In every case the successful handling of urinary infections depends on three cardinal principles. (1) Ascertain if possible the infecting organism. (2) Be sure that the kidney function is adequate to secrete the antiseptic employed. (3) Correct any existing urinary stasis.

The drugs reviewed all have a place in the proper management of urologic conditions.

BIBLIOGRAPHY

1. Ducoudray, L.: *Le Sanatol dans le traitement de la blennorrhagie*, Paris thesis, Paris, 1900.
2. Winternitz, R.: Ueber die entzündungswidrige Wirkung ätherischer Öle, Arch. f. Exper. Path. u. Pharmacol. **46**:163-180, 1901.
3. Hinman, Frank: Urinary Antiseptics, J.A.M.A. **65**:1769-1775 (Nov. 20) 1915.
4. Campbell, M.F.: *Infections of the Kidney*, New York: Harper & Bros., 1931.
5. Levy, L. H., and Strauss, A.: Clinical and Bacterial Study of Hexamethylenamine as a Urinary Antiseptic, Arch. Int. Med. **14**:730-742 (Nov.) 1914.
6. Davis, E., and Sharpe, J. C.: A Comparison of Methenamine, Caprokol, Pyridium and Acraftavine as to Clinical Efficiency, J.A.M.A. **99**:2097-2100 (Dec. 17) 1932.
7. Helmholz, H. F.: The Effectiveness of Methenamine as a Urinary Antiseptic at Various Hydrogen Ion Concentrations, Proc. Staff Meet, Mayo Clin. **7**:374-376 (June 22) 1932.
8. Clark, A. L.: Bacilluria Under Ketogenic Treatment, J.A.M.A. **98**:1710-1711 (May 14) 1932.
9. Rosenheim, M. L.: Mandelic Acid in the Treatment of Urinary Infections, Lancet **1**:1032-1036 (May 4) 1935.
10. Domagk, G.: Ein Beitrag zur Chemotherapie der Bakteriellen Infektionen, Deutsche med Wchnschr. **61**:250-253 (Feb. 15) 1935.
11. Long, P. H., and Bliss, E. A.: *The Clinical and Experimental Use of Sulfanilamide, Sulfapyridine and Allied Compounds*, New York: Macmillan Co., 1939.
12. Helmholz, H. F.: Bacterial Power of the Urine After the Administration of Prontylin by Mouth, Proc. Staff Meet., Mayo Clin. **12**:244-245 (Apr.) 1937.
13. Dees, J. E., and Colston, J. A. C.: The Use of Sulfanilamide in Gonococci Infections, J.A.M.A. **108**:1855-1858 (May 29) 1937.
14. Lowsley, O. S., and Forsythe, W. E., Jr.: Urinary Antiseptics, S. Clin. North America **20**:419-429 (Apr.) 1940.
15. Randall, A., and Hughes, B.: Therapeutic Management of Urinary Infections, Ann. Surg. **108**:903-909 (Nov.) 1938.
16. Helmholz, H. F.: Bactericidal Effect of Sulfathiazol and Sulfamethylthiazol in Bacteria Found in

Urinary Infections, Proc. Staff Meet., Mayo Clin. **15**: 65-68 (Jan. 31) 1940.

17. Summerfeldt, P., and Mitchell, D. R.: Treatment of Urinary Infections in Children with Sulfanilamide, J. Urol. **41**:59-63 (Jan.) 1939.

18. Herrold, R. D.: Treatment of Gonorrhea and Other Infections of the Urinary Tract with Sulfanilamide, Urol. & Cutan. Rev. **41**:468-471 (July) 1937.

308 Florida National Bank Bldg.

TREATMENT OF GONORRHEA WITH SULFANILAMIDE

H. J. IRELAND, M. D.

New York

and

C. LIPPOW, M. D.

Miami Beach

The use of sulfanilamide in the treatment of gonorrhea with reported fatalities has moved us to sound a word of caution. Recent reports made by English observers of the recurrence of gonorrhea after several months latency prompts us to recite our own method of treatment of the disease.

Sulfanilamide has been used by us since its advent, and at first we endeavored to obtain the rapid blood concentration of 4.7 mg. per hundred cubic centimeters suggested as most effective by Long and Bliss,¹ the drug being given at intervals of from three to four hours with a daily total of 80 grains. Toxic effects so common as scarcely to need repetition here, such as paleness, cyanosis, listlessness, drowsiness and photosensitive rash, were quickly noted. Their severity often compelled at least partial withdrawal of the drug. In those cases in which we were able to maintain the advocated dosage we were still unable to effect cures in the one or two weeks mentioned in reports on the drug. Moreover, we felt and still feel that gonorrhea is not a disease of such seriousness as to justify the subjection of the patient to the hazards of a medication with possible fatal consequences.

Too, the clinical responses obtained by this method of treatment were not always satisfactory, as evidenced by the following report of a case seen in consultation by one of us (CL):

In a 30 year old man treated for a first infection, the discharge appeared on the fourth day following exposure. Fifty grains of sulfanilamide daily was given by his physician for three weeks. The discharge diminished, but did not cease. At the end of the third week an elevation of temperature occurred accompanied by a

swelling of the ankle, knee and carpometacarpal joints on the right side. In spite of the fairly large dosage used in this case a systemic involvement was not prevented.

We, therefore, set out to devise a method of treatment which would avoid the dangers and yet retain the advantages attending administration of the drug.

Since gonorrhea is from the time of the appearance of the urethral discharge definitely a systemic and not a local disease, the dominant role of the stimulated natural immunologic processes must not be lost sight of. In our opinion they are of tremendous importance in effecting a cure. Any other attempted curative procedures merely supplement their activity and enhance the healing process, at the same time lessening the morbidity.

It is well to recall that gonorrhea has been treated intelligently and successfully in the past and without fatalities attributable to either the method or medication used. The washing of the anterior urethra with freshly prepared argyrol serves to cleanse it mechanically of cellular debris and bacteria. With the advent of sulfanilamide this concept and its application have been forgotten or relegated to a role of minor importance, while chemotherapy in all its force has been loosed on the gonococcus with at least occasionally disastrous results to the host. Since peptones are present as a result of the destruction of tissue incident to the attack of the gonococcus on the urethral mucosa, it seems logical to suppose that the action of sulfanilamide would be enhanced by such mechanical removal of detritus.

It is not yet definitely known how sulfanilamide functions, that is, whether it is bactericidal, bacteriostatic, or antibody-producing in nature. The preponderance of evidence favors the bacteriostatic action, and it is believed that there is an interference with the nutritional requirements of the susceptible bacteria with again less action occurring in the presence of the peptones. (Lockwood and Lynch²).

Our method, now sufficiently tried to prove to us its efficacy, is based upon an evaluation of the foregoing concepts. Being unable to give sulfanilamide in sufficient dosage to attain the supposed maximum effect without producing toxic manifestations and furthermore being unwilling to subject our patients to the hazards mentioned, we have chosen the

¹From the Department of Urology, New York Polyclinic Hospital and Medical School.

middle way by combining sulfanilamide in small doses with anterior irrigations.

This treatment is, we believe, in accordance with the accepted purpose of any treatment in this disease, namely, the attempt at destruction of the gonococci wherever they are accessible, with the stimulation of the general body processes and specifically those of the affected tissues against the infection. The symptoms then are alleviated, the incidence of complications lessened and the cure of the disease hastened.

Untoward effects are not seen in our patients, and no serious complications have developed. Also, we have been spared the dread that accompanies the administration of large doses of sulfanilamide, that of leukopenia developing with its possible fatal outcome.

We have noted that the natural defense mechanism so important in combating the infection is more effective when sulfanilamide is withheld for at least eight days subsequent to the appearance of the discharge. During this period we administer the irrigations alone. Sulfanilamide 30 grains daily is then given in divided doses for one week combined with the anterior irrigations, preferably of freshly prepared ten per cent solution of argyrol although a solution of the mild colloidal silver preparations may be used. This dose of sulfanilamide is either continued for the following week or reduced to 20 grains a day, depending upon the clinical response.

The report of a typical case will best illustrate our method and its results:

In a patient aged 34 with a second infection and exposure seven days previously, the discharge appeared on the third day, thick, purulent and positive for gonococci. Anterior irrigation with one-fourth per cent protargol was carried out three times daily for seven days; sulfanilamide 30 grains a day in divided doses was given beginning on the eighth day after the appearance of the discharge, and anterior irrigations were continued. On the fifteenth day the discharge disappeared though the centrifuged first glass of urine contained numerous pus cells with occasional intracellular and extracellular diplococci. The patient's systemic condition was normal as well as the white cell count. Twenty grains of sulfanilamide was then given in four 5 grain doses, and the urethra was irrigated twice daily. At the end of the third week the urine was clear of diplococci though occasional pus cells were still present in the centrifuged specimen of urine. Anterior irrigations were then stopped, but sulfanilamide 20 grains a day was continued for one more week. Thereafter the patient was observed for a period of two months during which time provocation on several occasions proved that the patient had been cured.

The dosage of 20 grains may be continued for weeks if needed without causing any un-

toward reaction. There follows the report of a case in which the patient required prolonged treatment.

Examination of a man aged 21 with a first infection and discharge appearing on the third day after exposure revealed profuse discharge, swelling and edema of the prepuce (paraphimosis). Multiple verrucae were noted about the meatus and glands, also on the inner surface of the prepuce. Since irrigations could not be given, hot local applications were administered together with 30 grains of sulfanilamide daily for four days. On the fifth day it was necessary to circumcise and fulgerize the verrucae since the discharge, while lessening, was still profuse. The circumcision wound healed rapidly. The dosage of 30 grains was maintained for another week and then reduced to 20 grains, and this treatment was combined with anterior irrigations. Verrucae persisted within the meatus, but disappeared upon a single application of trichloroacetic acid. The combined treatment rapidly lessened the infection to the point of clearing the urine completely. The dosage of 20 grains daily was continued for over a month because of the concomitant lack of drainage owing to the verrucae and paraphimosis present. Throughout the prolonged period of administration of this drug in small amounts the patient was well, continued to work and showed clinically no toxic symptoms.

All types of provocation are used by us; they include alcohol ingestion, silver instillation, instrumentation and other means. Relapses and complications do not occur in our cases even though the maximum dose of 30 grains daily is not exceeded.

We are unable to report any five day or two week cures with this type of treatment such as others have claimed following the administration of large doses, nor do we feel that such results are often obtainable. We have been gratified, however, in having patients able to pursue their normal occupations during the period of treatment unhampered by the physical and mental sluggishness and retardation so common to those taking a higher dosage. Grave morbidity, hematuria, stone formation, blood dyscrasias and other complications associated with the administration of some of the related compounds such as sylfapyridine and sulfathiazol have neither occurred nor been feared. It is our observation that the combination of these drugs with each other or with sulfanilamide is to be avoided.

Our conclusion is that sulfanilamide, if it is to be effective in the treatment of gonorrhea, should be administered in the smaller dosage indicated herein; if no appreciable improvement is noted within two weeks, the drug should be discontinued.

SUMMARY

A brief discussion of the present concept of the mode of action and use of sulfanilamide in

gonococcic infections is given. The importance of not losing sight of the time-proven worth of anterior irrigations is stressed. Our observations and conclusions are given; they agree in the main with those of the English clinicians working in this field, but differ in that we do not favor the high dosage employed by them. Large doses do not prevent systemic involvement. Typical cases treated by us, the method we use and the results obtained are presented with an attempt at rationalization of the employed procedure. Permanency of cure, avoidance of complications and promotion of the constitutional well-being of the patient during treatment and afterward are the primary objectives of treatment. The time factor should not be considered an element of prime importance.

REFERENCES

1. Long, H. P., and Bliss, E. A.: Observation upon Mode of Action and Clinical Use of Sulfanilamide in Urinary Tract Infections, *South. M. J.* 31: 308-315 (Mar.) 1938.
2. Lockwood, J. S., and Lynch, H. M.: Mechanism of Action of Sulfanilamide; Influence of Proteolytic Products on Effectiveness of Sulfanilamide, *J.A.M.A.* 114: 935-940 (Mar. 16) 1940.

THE VALUE OF INTRAPLEURAL PNEUMONOLYSIS IN ARTIFICIAL PNEUMOTHORAX THERAPY IN PULMONARY TUBERCULOSIS

Thomas C. Black, M. D.
Orlando

It has long been recognized that adhesive pleuritis, occurring in varying degree from a few string adhesions to extensive areas in which the lung is adherent to the chest wall, is the main cause of an inadequate pneumothorax. Alexander¹ stated that in from 42 to 50 per cent of the cases in which it is employed, artificial pneumothorax is ineffective as such. Any procedure that can change it in some instances into an effective compression is indeed worthwhile.

Since Jacobaeus¹ reported the first successful intrapleural pneumonolysis in 1915, this procedure has been gradually more and more widely adopted as an integral part of artificial pneumothorax, the most important type of collapse therapy used in the treatment of pulmonary tuberculosis. To illustrate this relationship, a summary has been made of the cases in which intrapleural pneumonolysis has been performed on the white patients at the Florida State Tuberculosis Sanatorium.

The electrosurgical method was employed in all cases of this series, and the Julian Moore instruments were used.

Following the induction of artificial pneumothorax the operation may be done at any time after sufficient compression has been produced to allow manipulation of the instruments, but it is usually performed from two to six months after the initial pneumothorax. This time is desirable as it allows for stabilization of the compression and of the mediastinum together with some stretching of the adhesions, and permits performance of the operation prior to vacularization of the adhesions or spread of the infection.

Pneumonolysis is indicated: (1) in patients with adhesions that prevent an effective collapse, thus interfering with control of the infection because of insufficient relaxation of the diseased area; (2) in patients in whom there is a tendency toward loss of collapse as a result of contraction of adhesions; and (3) in patients in whom it is necessary to improve the selectivity of collapse and conserve good lung tissue.

In all cases with adhesions careful study of stereoroentgenographs provides much information of an approximate nature only. It is often the case that one finds many more adhesions by direct examination than appeared likely on previous inspection of the roentgenograms. Any patient in whom it appears possible to make ineffective pneumothorax effective should have the benefit of an exploratory pneumonolysis. If this operation seems too hazardous, then other forms of collapse therapy may be considered.

During the period from February 1938 to July 1940, 308 white patients received treatment by artificial pneumothorax in some degree. In 84 it was discontinued because of unsatisfactory collapse. In 29 pneumothorax was performed on one side, and it was attempted or further collapse measures were carried out in the contralateral lung of these patients. Bilateral pneumothorax was successfully carried out in 32 patients; this group will be considered separately. For 163 patients treatment by pneumothorax was successful. Thus 224 of the original patients received treatments by pneumothorax. Since pneumonolysis was attempted in 72 of these patients, a satisfactory collapse was, therefore, obtained by pneumothorax alone in 152 pa-

tients, or 49.3 per cent of the entire series. Of these, 69, or 22.4 per cent of the 308 patients, had a successful lysis.

TABLE 1

STAGE	Successful Pneumo. Pts.	Pts. Receiving Lysis	No. Stages Operation
Minimal	5	2	2
Moderately Advanced	51	9	9
Far Advanced	136	53	64
Total	192	64	75

In 5 of the 32 patients subjected to bilateral pneumothorax, in all of whom the disease was far advanced, bilateral pneumonolysis was performed in twelve stages. Thus a total of 69 patients had 87 operations on 74 lungs. Following exploratory thoracoscopy in 3 others, pneumothorax was discontinued.

TABLE 2

STAGE	Satisfactory Collapse		Unsatisfactory Collapse	
	No. Pts.	Lungs	No. Pts.	Lungs
Minimal	2	2	0	0
Moderately Advanced	9	9	0	0
Far Advanced	40	40	13	13
Total	51	51	13	13
Bilateral Far Adv.	5	10	0	0
Total	56	61—82.4%	13	13—17.6%

TABLE 3

No. Pts.	Complication	% 74 Lungs	% 87 Op.
1	Empyema (Tbc.)	1.35	1.14
4	Oblit. Pleuritis	5.4	4.56
1	Hemorrhage	1.35	1.14

TABLE 4

STAGE	Status of Pts. Discharged					Status of Pts. Still in Residence	
	Ap. Arrest	Quiescent	Improved	Unimproved	Dead	Improved	Unimproved
Min.	0					2	
Mod. Adv.	4					5	
Far Adv.	5		1		1	37	9
Total	9—14%	0	1—1.56%	0	1—1.56%	44—68.7%	9—14%

Examination of the sputum of the 2 patients with minimal disease and 2 in whom it was moderately advanced gave negative results before operation, but relaxation of the diseased area previously under tension and a satisfactory result were obtained. In the other 7 patients with the disease in the moderately advanced stage, sputum conversion and satisfactory collapse followed pneumonolysis. In 10 of the 53 patients in whom the disease was far advanced, sputum conversion had taken place prior to operation. Despite this, cavita-

tion was still evident in 3, and in all 10 diseased areas under tension were relaxed with pneumonolysis, thus improving the collapse. Sputum conversion occurred in 29 patients. Severing adhesions produced satisfactory collapse in 24 patients; with 5 the collapse was unsatisfactory. Of the 13 patients remaining in whom sputum conversion did not occur, a satisfactory collapse and an improved condition resulted in 3, 2 were unimproved after satisfactory collapse and in 6 pneumothorax was discontinued after unsatisfactory collapse, as was the case with 1 patient in whom tuberculous empyema developed. One patient died from postoperative hemorrhage. In the 5 patients treated bilaterally sputum conversion and a satisfactory compression of both lungs occurred in each instance.

In a number of patients a transient pleural effusion developed that required no treatment. There were a few patients in whom larger effusions developed that required aspiration on one or more occasions before the fluid was absorbed; the one exception was the patient with tuberculous empyema. In four patients an obliterative pleuritis occurred.

Of the 5 patients treated bilaterally, 1 was discharged with the disease apparently arrested; the other 4 in residence are improved. Of the 64 patients receiving treatment unilaterally, in 9 or 14 per cent the disease is apparently arrested; 45 or 70 per cent are improved, 9 or 14 per cent are unimproved and 1 or 1.5 per cent is dead.

CONCLUSION

1. In a high percentage of cases unsatisfactory pneumothorax may be made effectual when intrapleural pneumonolysis is possible.
2. Adhesions may be severed early in the course of artificial pneumothorax.
3. The end results of intrapleural pneumonolysis must be finally evaluated as artificial pneumothorax statistics.

REFERENCE

1. Alexander, J.: *The Collapse Therapy of Pulmonary Tuberculosis*, Springfield, Ill.: C. C. Thomas, 1937.
State Tuberculosis Sanatorium

Florida Medical Association, Inc.

Officers and Committees

OFFICERS

WALTER C. JONES, M.D., President *Miami*
 GILBERT S. OSINCUP, M.D., President-Elect *Orlando*
 LUTHER W. HOLLOWAY, M.D., 1st Vice-Pres. *Jacksonville*
 FREDERICK K. HERPEL, M.D., 2nd Vice-Pres. *W. Palm Beach*
 WALTER C. PAYNE, M.D., 3rd Vice-Pres. *Pensacola*
 SHALER RICHARDSON, M.D., Sec'y-Treas. *Jacksonville*

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H. *Jacksonville*

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., Chairman, "C," '44 *Jacksonville*
 J. ROCHER CHAPPEL, M.D., "E," '43 *Orlando*
 GEORGE L. COOK, M.D., "D," '42 *Tampa*
 FREDERICK K. HERPEL, M.D., "F," '43 *West Palm Beach*
 WALTER C. PAYNE, M.D., "A," '44 *Pensacola*
 WILLIAM C. THOMAS, M.D., "B," '42 *Gainesville*
 WALTER C. JONES, M.D. (Ex-officio) *Miami*
 SHALER RICHARDSON, M.D. (Ex-officio) *Jacksonville*
 STEWART G. THOMPSON, D.P.H. (Advisory) *Jacksonville*

SCIENTIFIC WORK

H. E. WHITE, M.D., Chairman, "C," '43 *St. Augustine*
 LELAND F. CARLTON, M.D., "D," '42 *Tampa*
 CHARLES J. COLLINS, M.D., "E," '43 *Orlando*
 ROBERT B. HARKNESS, M.D., "B," '42 *Lake City*
 HOMER L. PEARSON, M.D., "F," '44 *Miami*
 JAMES H. POUND, M.D., "A," '44 *Tallahassee*

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAICK, M.D., Chairman, "C," '43 *Jacksonville*
 LAURIE J. ARNOLD, Jr., M.D., "B," '44 *Lake City*
 HORACE A. DAY, M.D., "E," '44 *Orlando*
 WHITMAN C. MCCONNELL, M.D., "D," '42 *St. Petersburg*
 BRUCE M. RHODES, M.D., "A," '42 *Tallahassee*
 JOSEPH S. STEWART, M.D., "F," '43 *Miami*

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., Chairman, "D," '42 *Tampa*
 REDDIN BRITT, M.D., "C," '42 *St. Augustine*
 ROBERT D. FERGUSON, M.D., "B," '43 *Ocala*
 J. N. McLANE, M.D., "A," '44 *Pensacola*
 CAYETANO PANETTIERE, M.D., "F," '44 *Miami Beach*
 WALTER A. WEED, M.D., "E," '43 *Lakeland*

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., Chairman, "C," '42 *Daytona Beach*
 WILBUR L. ASHTON, M.D., "E," '42 *Jacksonville*
 SIDNEY G. KENNEDY, M.D., "A," '43 *Pensacola*
 BAILEY B. SORY, JR., M.D., "F," '44 *Palm Beach*
 JAMES L. STRANGE, M.D., "B," '44 *McIntosh*
 HARPER E. WHITAKER, M.D., "D," '43 *Tampa*

NECROLOGY

HUBERT A. BARGE, M.D., Chairman, "F," '42 *Miami*
 HAYNSWORTH D. CLARK, M.D., "E," '42 *Ft. Pierce*
 AUGUSTUS E. CONTER, M.D., "A," '43 *Apalachicola*
 GEORGE R. CREEKMORE, M.D., "B," '43 *Brooksville*
 JULIAN L. HARGROVE, M.D., "D," '44 *Bartow*
 ARTHUR J. LOGIE, M.D., "C," '44 *Jacksonville*

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chairman, "C," '42 *Jacksonville*
 HERBERT L. BRYANS, M.D., "A," '43 *Pensacola*
 W. WELLINGTON GEORGE, M.D., "F," '43 *West Palm Beach*
 FRANK D. GRAY, M.D., "E," '44 *Orlando*
 DAVID R. MURPHEY, JR., M.D., "D," '44 *Tampa*
 GEORGE C. TILLMAN, M.D., "B," '42 *Gainesville*

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chairman, "F," '44 *Miami*
 JAMES M. HOFFMAN, M.D., "A," '42 *Pensacola*
 HEWITT JOHNSTON, M.D., "E," '43 *Orlando*
 J. N. MOORE, M.D., "B," '44 *Ocala*
 R. W. S. OWEN, M.D., "D," '43 *St. Petersburg*
 HARRY A. PEYTON, M.D., "C," '42 *Jacksonville*

MEDICAL ECONOMICS

H. A. WALKER, M.D., Chairman, "F," '44 *Miami Beach*
 EDWIN H. ANDREWS, M.D., "B," '44 *Gainesville*
 ROBERT P. HENDERSON, M.D., "E," '43 *Orlando*
 EDWARD JELKS, M.D., "C," '42 *Jacksonville*
 JOSEPH W. TAYLOR, M.D., "D," '42 *Tampa*
 COURTLAND D. WHITAKER, M.D., "A," '43 *Marianna*

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chairman, "C," '42 *Jacksonville*
 ELMO D. FRENCH, M.D., "F," '44 *Miami*
 ALVIN L. MILLS, M.D., "D," '44 *St. Petersburg*
 LOUIS M. ORR, II, M.D., "E," '42 *Orlando*
 JOHN H. THOMAS, M.D., "B," '43 *Gainesville*
 JOE I. TURBERVILLE, M.D., "A," '43 *Century*

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chairman, "F," '44 .. *Ft. Lauderdale*
 ISAAC M. HAY, M.D., "E," '42 *Melbourne*
 JOHN E. MAINES, JR., M.D., "B," '44 *Gainesville*
 GEORGE C. OVERSTREET, M.D., "D," '42 *Lakeland*
 EDWIN C. SWIFT, M.D., "C," '43 *Jacksonville*
 RUFUS THAMES, M.D., "A," '43 *Milton*

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., Chairman, "F," '42 *Miami*
 WILLIAM C. BLAKE, M.D., "D," '42 *Tampa*
 J. MAXEY DELL, JR., M.D., "B," '44 *Gainesville*
 DUNCAN T. MCEWAN, M.D., "E," '43 *Orlando*
 ROBERT G. NOBLES, M.D., "A," '44 *Pensacola*
 LUDO VON MEYENBUG, M.D., "C," '43 *Daytona Beach*

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., Chairman, "E," '44 .. *Orlando*
 HARRY S. HOWELL, M.D., "B," '43 *Lake City*
 PAUL KELLS, M.D., "F," '43 *Miami*
 ERNEST B. MILAM, M.D., "C," '42 *Jacksonville*
 WILLIAM D. ROGERS, M.D., "A," '44 *Chattahoochee*
 WILLIAM M. ROWLETT, M.D., "D," '42 *Tampa*

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., Chairman, "F," '42 *W. P. Bch.*
 LAURIE L. DOZIER, M.D., "A," '44 *Tallahassee*
 I. M. HAY, M.D., "E," '43 *Melbourne*
 W. WARDLAW JONES, M.D., "B," '44 *Dade City*
 ROBERT G. NELSON, M.D., "D," '42 *Tampa*
 FERDINAND RICHARDS, M.D., "C," '43 *Jacksonville*

CHILD HEALTH

W. W. QUILLIAN, M.D., Chairman, "F," '44 .. *Coral Gables*
 THOMAS M. PALMER, M.D., "C," '43 *Jacksonville*
 EUGENE G. PEEK, M.D., "B," '42 *Ocala*
 COUNCIL C. RUDOLPH, M.D., "D," '42 *St. Petersburg*
 WILLIAM E. SINCLAIR, M.D., "E," '44 *Orlando*
 ALVYN W. WHITE, M.D., "A," '43 *Pensacola*

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., Chairman, "C," '42 *Jacksonville*
 JAMES L. CHALKER, M.D., "B," '42 *Ocala*
 LUTHER C. FISHER, JR., M.D., "A," '43 *Pensacola*
 JOHN D. HAGOOD, M.D., "D," '43 *Clearwater*
 LAWRENCE C. INGRAM, M.D., "E," '44 *Orlando*
 ARTHUR L. WALTERS, M.D., "F," '44 *Miami Beach*

COUNCILOR DISTRICTS AND COUNCILORS

Twelfth—W. DUNCAN OWENS, M.D., Chmn., '43 *Miami Bch.*
 First—WILLIAM C. ROBERTS, M.D., '42 *Panama City*
 Second—C. D. WHITAKER, M.D., '43 *Marianna*
 Third—J. M. PRICE, M.D., '43 *Live Oak*
 Fourth—ALVA T. COBB, M.D., '42 *Gainesville*
 Fifth—LUCIEN Y. DYRENFORTH, M.D., '43 *Jacksonville*
 Sixth—MAXIMILIAN STERN, M.D., '42 *Daytona Beach*
 Seventh—JOHN R. BOLING, M.D., '43 *Tampa*
 Eighth—HOWARD V. WEEMS, M.D., '42 *Sebring*
 Ninth—CARL D. HOFFMANN, M.D., '42 *Orlando*
 Tenth—E. B. HARDEE, M.D., '43 *Vero Beach*
 Eleventh—ROBERT L. ELLISTON, M.D., '42 .. *Ft. Lauderdale*

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., Chairman, "A," '43 *Quincy*
 THOMAS H. BATES, M.D., "B," '43 *Lake City*
 R. RENFRO DUKE, M.D., "D," '44 *Tampa*
 WILLIAM S. MANNING, M.D., "C," '42 *Jacksonville*
 RICHARD H. WALKER, JR., M.D., "E," '44 *Orlando*
 ARTHUR H. WEILAND, M.D., "F," '42 *Coral Gables*

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman *Jacksonville*
 WALTER C. JONES, M.D., *Miami*
 SHALER RICHARDSON, M.D. *Jacksonville*
 JAMES E. PAULLIN, M.D. (A.M.A. ex-officio) *Atlanta*

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate *Jacksonville*
 HERBERT L. BRYANS, M.D., Alternate *Pensacola*
 (Terms expire Dec. 31, 1942)

MEREDITH MALLORY, M.D., Delegate *Orlando*
 GEORGE M. DAWSON, M.D., Alternate *West Palm Beach*
 (Terms expire Dec. 31, 1943)

Committees—Continued on next page

Committees—Continued

GENERAL ADVISORY BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., Chairman, 1919	.....	Jacksonville
W. HENRY SPIERS, M.D., Secretary, 1938	.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902	.....	Pensacola
HENRY E. PALMER, M.D., 1909	.....	Tallahassee
ROBERT H. MCGINNIS, M.D., 1915	.....	Jacksonville
FREDERICK J. WALTER, M.D., 1918	.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920	.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923	.....	Jacksonville
JOHN C. VINSON, M.D., 1924	.....	Tampa
JOHN S. MCEWAN, M.D., 1925	.....	Orlando
H. MASON SMITH, M.D., 1926	.....	Tampa
JOHN A. SIMMONS, M.D., 1927	.....	Arcadia
FREDERICK J. WAAS, M.D., 1928	.....	Jacksonville
HENRY C. DOZIER, M.D., 1929	.....	Ocala
JULIUS C. DAVIS, M.D., 1930	.....	Quincy
GERRY R. HOLDEN, M.D., 1932	.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933	.....	Tampa
HOMER L. PEARSON, M.D., 1934	.....	Miami
HERBERT L. BRYANS, M.D., 1935	.....	Pensacola
ORION O. FEASTER, M.D., 1936	.....	St. Petersburg
EDWARD JELKS, M.D., 1937	.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939	.....	Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940	.....	Century

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in
Section 1103, Act of Congress of October 3, 1917;
authorized October 16, 1918

Published monthly at Jacksonville, Florida. Price \$3.00 a year.
Single numbers, 30 cents

This Journal is not responsible for the opinions and statements
of its contributors

Address Journal of the Florida Medical Association, Inc., Box 1018
Jacksonville, Fla. Telephone 5-0577

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.	.....	Orlando
FRANK C. METZGER, M.D.	.....	Tampa
HOMER L. PEARSON, M.D.	.....	Miami
J. H. POUND, M.D.	.....	Tallahassee
W. McL. SHAW, M.D.	.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., Chairman	.....	Miami
SHALER RICHARDSON, M.D.	.....	Jacksonville
HERMAN WATSON, M.D.	.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman	.....	Jacksonville
THEODORE F. HAHN, M.D.	.....	DeLand
COUNCIL C. RUDOLPH, M.D.	.....	St. Petersburg

YOUR DISTRICT MEETING

Many factors are important in building up a successful practice, among them ability, training, personality, and a wide professional acquaintanceship. Though the last named is, of course, the easiest to acquire, its importance was understood by the founders of the Association who, in drawing up the constitution of the organization, stated that one of its purposes "shall be to federate and bring into one compact organization the entire medical profession of the State of Florida . . . with a view to the promotion of friendly intercourse among

physicians and to the guarding and furthering of their material interests."

The need of affording opportunities for physicians to exchange ideas and enlarge their acquaintanceship was further recognized by more recent workers in the Association who instituted the district meetings for this purpose.

Especially at this time is it important to keep in the foreground. Many of our older members have lost their young associates to the military service and are in need of assistance. Many new members have joined the Association whose positions are not yet secure and who can benefit greatly by close association with our older members. To all of these the district meetings fill a special need.

The councilors, under the chairmanship of Dr. W. Duncan Owens, and the entertaining societies have arranged interesting scientific programs and excellent entertainment for members, guests and ladies at the six meetings this fall. Come to one or more of these meetings and find stimulation through the exchange of ideas with your colleagues. Make a note of the date and place of the meetings you plan to attend.

"A" Tallahassee, October 2

"B" Gainesville, October 3

"C" St. Augustine, October 4

"F" Hollywood, October 30

"D" Bartow, October 31

"E" Orlando, November 1

DANGER OF EYE INJURIES FROM BLASTING CAPS

Calling attention to the fact that blasting caps and detonating fuses are dangerous playthings for children and may cause blindness or serious eye injuries, a warning to parents concerning this hazard was issued recently by Mrs. Eleanor Brown Merrill, Executive Director of the National Society for the Prevention of Blindness. Mrs. Merrill said:

More than 150 juvenile casualties of this kind, including 24 eye injuries, were reported last year by the Institute of Makers of Explosives. The National Society for the Prevention of Blindness is glad to cooperate with the Institute in its educational campaign to reduce the number of these tragedies.

The great majority of such accidents to children take place either in rural localities or near small towns, and about 90 per cent of the victims are boys. Farmers, construction forces, mine workers and railway men who use explosives can help save children from death and serious injury by storing blasting caps and fuses under lock and key, and by being careful not to discard such caps where children can get them.

CHATTAHOOCHEE VALLEY MEDICAL SOCIETY

The Chattahoochee Valley Medical Society, comprised of leading physicians and surgeons from Florida, Georgia and Alabama, held its forty-first annual session in Jacksonville, July 31 to August 2, inclusive. The comprehensive scientific program consisted of operative and dry clinics, articles, and round table discussions. The following Florida physicians contributed to the program:

Dr. Edward Jelks, Jacksonville, operative clinic, "Thyroidectomy."

Dr. Walter C. Jones, Miami, dry clinic, "Perineal Repair."

Dr. Julian Gammon, Jacksonville, paper, "Rheumatoid Arthritis."

Dr. Louis M. Orr, Orlando, paper, "Treatment of Cancer of the Penis; Modification of the Radical Operation."

Dr. T. Z. Cason, Jacksonville, presided at a round table luncheon when questions based on preceding clinics and papers were discussed.

Dr. J. Sam Turberville of Century presided at a conference at which surgical questions were discussed.

Dr. Shaler Richardson, Jacksonville, paper, "Some Points Concerning Retinal Detachment."

Dr. Tracy Haverfield, Jacksonville, paper, "Cordotomy as a Procedure for the Relief of Intractable Pain."

Dr. Duncan Owens, Miami Beach, presented "Postoperative Hormonal Therapy to Spare Remaining Ovarian Tissue."

Dr. E. V. Anderson of Pensacola, "Sulfathiazole in the Treatment of Infectious Diarrheas."

Dr. Frederick J. Waas, Jacksonville, acted as toastmaster at the annual dinner at which time Dr. Clayton E. Royce of Jacksonville gave the W. J. Love Memorial Address, entitled, "The Approach."

Dr. Herbert E. White of St. Augustine was elected president of the Society, succeeding Dr. Frank K. Boland of Atlanta. Other officers elected were Dr. D. Henry Poer of Atlanta, first vice president to succeed Dr. William F. Harper of Selma, Ala.; Dr. D. C. Donald of Birmingham, second vice president to succeed Dr. White, the new president; Dr. Robert B. McIver of Jacksonville, re-elected secretary-treasurer, and Mrs. Eloise L. Moran of Jack-

sonville, re-elected executive secretary. Birmingham was chosen as the site for the 1942 session.

EXAMINATIONS FOR MEDICAL POSITIONS ANNOUNCED BY CIVIL SERVICE COMMISSION

Examinations for three types of medical positions in the Government service have just been announced by the Civil Service Commission. This is another indication of the great demand for technically trained personnel of every kind in the defense program. Each of these positions has been open to competition within the past year, but the demand grows even faster than the supply.

Junior medical officer positions at \$2,000 a year will be filled at St. Elizabeth's Hospital in Washington, D. C. There are two types of internship: Rotating and Psychiatric Resident. The rotating internship consists of 4 months of surgery, acute medical service, and of chronic medical service; 2 months of obstetrics and pediatrics, on affiliation; 3 months of general laboratory work; and 6 months of psychiatry. To qualify, applicants must be fourth-year students in a Class A medical school. Applicants must show completion of the course prior to June 30, 1942, before they may enter on duty. Graduates in medicine who have already served an accredited rotating internship are offered a postgraduate internship of 1 year of psychiatry (A. M. A. Classification 2, Type B). To qualify for this type of appointment, applicants must have completed their fourth year of study in a Class A medical school subsequent to December 1935 and must have either a B. M. or M. D. degree. Applications will be accepted at the Commission's Washington office until November 15, 1941, and will be rated as soon as practicable after receipt.

Medical technical assistant positions at \$2,000 a year and medical guard-attendant positions at \$1,620 a year will be filled in the Mental Hygiene Division of the U. S. Public Health Service. Applicants must be registered graduate nurses, or have been honorably discharged (within the 10 years immediately preceding date of receipt of application) from active service in the Medical Corps of the Army or Navy, or have had 3 years' service as guard-attendant in a Federal penal or correctional institution. In addition, for the technical assistant, applicants must show that their experience has included one year of responsible training or experience in Clinical Laboratory Technique, Pharmacy, or X-ray Laboratory Technique. Applications will be accepted until further notice. Persons who were rated eligible for these two positions in the examination which closed in February of this year need not apply for this new examination as eligibles from both examinations will be combined on the new register.

Further information and application forms may be obtained at any first- or second-class post office or from the Civil Service Commission in Washington. Qualified persons are urged to file their applications at once.

SULFANILAMIDE EFFECTIVE AGAINST FLARE-UPS OF RHEUMATIC FEVER

Evidence that the maintenance of certain levels of sulfanilamide in the blood by means of administering small daily doses is effective in preventing hemolytic streptococcic infections and the consequent flare-ups of rheumatic fever in persons known to be subject to recurrences is presented in *The Journal of the American Medical Association* for July 19 by

A. F. Coburn, M. D., and L. V. Moore, M. D., New York.

The two authors point out that a previous study had indicated that the maintenance throughout the school year of a certain level of sulfanilamide in the blood protected the children against streptococcic pharyngitis (inflammation of the pharynx) and rheumatic recrudescences. They say:

One factor that it was impossible to control in the New York study was the increasing age of the group. Between 1936 and 1939 many of the children passed puberty, and, as is well recognized, rheumatic subjects tend to have fewer recrudescences in adolescence than during childhood. It was therefore possible to regard the increasing age of our patients as largely contributory to the decreasing incidence of rheumatic fever.

One way of determining whether increasing age was significant in our results was to withdraw sulfanilamide from the patients who received prophylactic doses in the period 1936-1939. This we did during 1939-1940 to a group of 100 patients, mostly adolescents. None of these 100 patients had had streptococcic pharyngitis or manifestations of rheumatic activity while they received sulfanilamide. Since the prophylactic doses have been discontinued the patients have lived in the same environment and have received the same clinical and laboratory examinations as previously reported. Thirty-two of these 100 patients contracted hemolytic streptococcic pharyngitis during the first twelve months following the withdrawal of sulfanilamide, and in 40 per cent of these untreated, infected patients rheumatic fever developed. . . .

These follow-up observations show that the rheumatic children who escaped streptococcic infection and rheumatic activity while receiving sulfanilamide prophylactically between 1936 and 1939 were still susceptible in 1940 to both streptococcic pharyngitis and rheumatic fever.

It seems justifiable, therefore, to conclude that the absence of rheumatic recrudescence in the sulfanilamide-treated subjects previously reported was due to the drug and not to a change in susceptibility. It is also clear that the prophylactic effect of sulfanilamide does not exert any beneficial effect beyond the period of treatment.

NEW TEST FOR DETERMINING ADEQUACY OF CONNECTING VARICOSE VEINS

A test that determines within two minutes whether the branches of the veins connecting varicose veins with each other are functionally adequate is reported in *The Journal of the American Medical Association* for July 12 by Gerald H. Pratt, M. D., New York. The test is valuable in that it indicates whether and at what point a communicating vein will have to be ligated or shortened by surgically resecting part of it.

Dr. Pratt has used the test more than one thousand times and he says that in more than "three hundred resections [of these veins] it has successfully proved its value. . . ." Briefly the test is as follows:

With the patient lying down, the leg to be tested is elevated and with light massage the veins are emptied [of blood]. A tourniquet is placed sufficiently high in the thigh to close off the saphenous vein [the large vein extending from the foot to the groin]. An Ace [elastic] bandage is then applied from the toes to the tourniquet. The patient then stands up and the Ace bandage is slowly unwound from above down. With the tourniquet above preventing reflux of femoral blood [blood in the thigh vein] through the saphenous valve and with the Ace bandage below compressing the remainder of the saphenous vein, a bulge or blowout indicates an incompetent communicating branch vein. Such an area is marked with an indelible pencil and is a point where a secondary ligation [the large saphenous vein is the primary ligation] will be required. In a limb in which there are many such blowouts a second Ace bandage is applied from above down. As the first Ace bandage is slowly removed, a blowout appearing between the two Ace bandages is thus a new one and must also be marked and resected.

While in most instances there are only one or two such blowouts, occasionally, the author points out, one finds four or five. Failure to remove such other blowouts results in recurrences.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. Charles W. Boyd of Jacksonville announce the birth of a son, George Ross, on July 8.

MARRIAGES

Dr. Courtland D. Whitaker of Marianna and Miss Mildred Zeagler of Sylvania, Ga., were married July 6.

DEATHS

Dr. J. Kent Johnston of Tallahassee died on July 15.

* * *

Dr. Ralph N. Greene of Coral Gables died on Aug. 1.

STATE NEWS ITEMS

The Florida East Coast Medical Association will meet in Daytona Beach, December 4 and 5, 1941 (Friday and Saturday). Dr. J. Ralston Wells, secretary of the organization, in making this announcement, advised that more information concerning the scientific program and entertainment will appear in an early issue of the *Journal*. Dr. J. S. Stewart of Miami is president.

* * *

Dr. L. L. Lancaster of Bartow spent some time in July, studying at Mayo Clinic, Rochester, Minn.

* * *

Dr. Duncan McEwan of Orlando spent the month of July in Cooperstown, Otsego Lake, New York.

* * *

Dr. Ralph Gowdy of Miami Beach took special work at Mayo Clinic, Rochester, Minn., during the month of July.

Dr. H. A. Johnson of Palatka recently visited his father, Dr. D. N. Johnson of Decatur, Ga. The senior Johnson is now ninety years of age. Dr. Johnson also visited clinics in Atlanta and the Pediatric Clinic in Saluda, N. C., during the summer.

* * *

Dr. Maurice J. Rose of Miami Beach announces the opening of his offices at 420 Lincoln Road, Mercantile National Bank Building. Dr. Rose will limit his practice to obstetrics and gynecology.

* * *

Effective January 1, 1942, members of the Florida Medical Association will not be required to pay state dues while in military service. Members now in service are urged to pay their 1941 dues so they may be carried in 1942 without the payment of dues.

* * *

Dr. Frederick LeDrew of Miami was recently appointed a member of the Committee of Psychiatric Standards and Policies of the American Psychiatric Association. His appointment is for a period of five years. Dr. LeDrew is a Fellow of the American Psychiatric Association.

* * *

Members of the State Association who wish to read papers at one of the scientific sessions at the annual convention to be held in Palm Beach, April 13, 14 and 15, 1942, are urged to file applications at once with Dr. Herbert E. White, chairman of Committee on Scientific Work. Dr. White has announced that no general letter calling for applications will be mailed to the entire membership of the Association, as was done last year. All applications should be addressed to Dr. Herbert E. White, Box 1018, Jacksonville.

* * *

The Florida Board of Examiners in the Basic Sciences will hold its next examinations Saturday, November 1, 1941, at John B. Stetson University, DeLand. All requests for application blanks should be sent to Dr. John F. Conn, Secretary, State Board of Examiners in the Basic Sciences, John B. Stetson University, DeLand. The Florida law requires that all applications be made at least 15 days prior to the date of the examinations. October 17 is the deadline for mailing applications.

Dr. Allen P. Gurganious of Palatka visited clinics in North Carolina during the month of July.

* * *

Dr. Ralph F. Allen and Claude G. Mentzer of Miami attended the meeting of the American Proctologic Association held in Cleveland in June.

COMPONENT COUNTY SOCIETIES

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON

The Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society held its quarterly meeting at the Florida State Hospital on the afternoon of July 17. The following scientific program was presented:

"Calcium Metabolism," James K. Fancher, Atlanta, Ga.

"Report on Cases of Rattlesnake Bites," Chas. K. Wall, Thomasville, Ga.

"Shock Therapy in Mental Disorders with Demonstration of Electric Shock," W. G. Miles, Chattahoochee.

"A Year's Eye Service at the Florida State Hospital in Retrospect," F. V. Gammage, Chattahoochee.

Dinner was served at the Florida State Hospital.

* * *

PINELLAS

On Thursday, July 3, the Pinellas County Medical Society held its regular monthly meeting at the Palm Cafeteria, Clearwater. Dr. A. S. Anderson of St. Petersburg, first vice president, presided. The following guests were introduced: Dr. Horace W. Soper, St. Louis, Mo.; Dr. J. J. Guerra, Tampa; Dr. R. D. Thompson, Orlando; Mr. Hayden Kerr, Technician to Mease Hospital, Dunedin; Mr. H. S. Wurtele of Motion Picture Service, Tampa; and Mr. Ned A. Holman of Ortho Products, Inc., Linden, N. J.

The scientific program was in charge of Dr. M. A. Nickle, who introduced Dr. J. Sudler Hood of Clearwater. Dr. Hood presented a case report on "Nephrosis," which was discussed by Dr. Guerra. Dr. N. M. Marr of St. Petersburg spoke on "Health and Housing of Home Defense."



GROWING COMFORTABLY ON S-M-A



Pretty soft life! Nothing to do but eat, sleep and grow in comfort on S-M-A. It's a happy, healthy first year for the S-M-A fed infant because S-M-A promotes normal, comfortable growth.

In addition to fat, carbohydrate and protein of physiological characteristics and proportions, each feeding of S-M-A provides standardized quantities of iron and vitamin A, B₁ and D. Only vitamin C need be supplemented.

Prescribing S-M-A makes life more pleasant for the doctor and the mother, too, because excellent results are obtained simply and quickly.

" " "

Normal infants relish S-M-A . . . digest it easily and thrive on it.

" " "

**FOR TREATMENT OF FOOD
ALLERGY DUE TO SENSITIVITY
TO MILK PROTEIN**
A Special Product

HYP-ALLERGIC MILK

Hypo-Allergic Milk is thermally processed cows' whole milk in which the sensitizing properties of the protein are altered without affecting the caloric value of the protein or whole milk itself.

It may be used the same as cows' whole milk, as a beverage, or in infant feeding formulae where a sensitivity to milk protein is known to exist.

Complete information upon request.

*S-M-A, a trade mark of S.M.A. Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addition of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.



ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

The Etiology of Nerve Deafness with Particular Reference to Quinine, FORBES, S. B., Tampa, South. M. J. 33:613-620 (June), 1940.

Among the drugs capable of producing nerve deafness, quinine would seem to be important, whether used for malaria or as an abortifacient. Moreover, its widespread use in numerous patent medicines for colds, influenza and malaria may be responsible for some cases of nerve deafness. The production of deafness by quinine is not necessarily a matter of dosage, but may be one of individual sensitivity or allergy.

Quinine is capable of producing degeneration of the myelin sheath of the auditory nerve when given in massive doses. In therapeutic doses it has been found to cause degeneration of the spiral ganglion, the stria vascularis and the hair cells, and the basal coil of the cochlea. In the eye, quinine may affect the nerve fiber, the ganglion cell layer and perhaps the inner nuclear layer of the retina. The drug quinidine may be just as dangerous in producing these pathologic changes.

The author presents a series of cases of nerve deafness in which the etiologic role of quinine was not only suggestive but quite suspicious. In four cases of so-called congenital nerve deafness, the quinine causation could be more than inferred. In an analysis of 234 cases of nerve deafness, the author found the history of quinine usage to be four times as frequent as in 832 cases of deafness from other causes, and in the latter group none associated this deafness with quinine usage as did a fairly important percentage of patients among the 234 cases of nerve deafness.

It is important, therefore, to recall the dangers of using quinine, especially in labor, malaria in pregnancy, or as a pre-partum means of increasing uterine tonicity, as the danger of producing deafness in the fetus is considerable. Also, there is danger in the use of quinine and quinidine in conditions in which these drugs are commonly indicated.

Hypersensitivity to Sulfanilamide Following Roentgen Therapy, MARKS, M. B., Miami Beach, J. Pediat. 16:503-506 (April) 1940.

Two cases are reported in which exposure to x-ray for therapeutic purposes and exposure to sunlight while taking sulfanilamide caused severe local and constitutional reactions. Both patients had lymphadenitis, were given large doses of sulfanilamide with seeming good results, only to become worse when given therapeutic doses of x-rays. Other investigators have called attention to these phenomena of photosensitization and other sensitizations while the patient is receiving sulfanilamide dosages and have warned against the danger of combining the two.

An Unusual Case of Multiple Appendiceal Lithiasis, SHAHAN, JOHN, Clearwater, Radiology, 35:89-90 (July) 1940.

A case is reported in which 23 hard calcified stones were found in an appendix, removed because of digestive symptoms and because of a roentgen diagnosis of appendiceal lithiasis. The largest number of stones previously reported in the literature was 5.

It is interesting to note from added information by the author that later a small brown ureteral stone was removed from the left ureteral orifice; in the original paper it was reported that although the history had suggested ureteral colic, ureteral stones had not been detected on the roentgenograms.

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

PLAGUE ON US. By GEDDES SMITH. Here in an attractive form is a beautifully written account of man's battle against the plagues that have attacked him since the earliest times. For twenty centuries men have attempted scientifically to understand and forestall all pestilence. In our advance we have learned that such plagues are carried by insects and rodents. We have learned to know that they are caused by viruses and germs. We have developed vaccines and serums and preventive inoculations. These are the materials from which Geddes Smith has constructed this beautifully written book. He has had the advice of experts in the fields of bacteriology and epidemiology, and he tells the story of man's battle against the plagues in eight chapters, a prologue and an epilogue. Cloth, pp. 365, with illustrations. Price, \$3.00. New York: Commonwealth Fund; London: Oxford University Press, 1941.



DR. RANDOLPH'S SANITARIUM

JACKSONVILLE, FLORIDA

REGISTERED A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized.
Utmost privacy. Tactful nursing. Number patients limited to
insure maximum attention.

JAMES H. RANDOLPH, M. D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
Phone 2-2330

TAMPA

JACKSONVILLE

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*
Wyeth

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, President *Miami*
 MRS. F. W. KRUEGER, First Vice-President.....*Jacksonville*
 MRS. R. L. CLINE, Second Vice-President.....*Lakeland*
 MRS. PAUL KELLS, Corresponding Secretary.....*Miami*
 MRS. C. H. MURPHY, Recording Secy.-Treas.*Bartow*
 MRS. M. J. FLIPSE, Historian*Miami*
 MRS. L. C. INGRAM, Parliamentarian*Orlando*

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity.....*Jacksonville*
 MRS. P. J. MANSON, Hygeia*Miami*
 MRS. RUPERT STOVALL, Public Relations.....*Ft. Lauderdale*
 MRS. E. M. HENDRICKS, Legislation*Ft. Lauderdale*
 MRS. GORDON H. IRA, Finance.....*Jacksonville*
 MRS. T. C. KENASTON, Exhibits.....*Cocoa*
 MRS. CLYDE ANDERSON, Archives*St. Petersburg*
 MRS. GEORGE C. TILLMAN, Student Loan*Gainesville*
 MRS. F. W. KRUEGER, Program.....*Jacksonville*
 MRS. R. L. CLINE, Organization.....*Lakeland*
 MRS. JOHN H. OWENS, Bulletin.....*Jacksonville*

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B"*Gainesville*
 MRS. E. W. VEAL, Northeast "C"*Jacksonville*
 MRS. J. C. GRIFFIN, Southwest "D"*Tampa*
 MRS. W. C. PAGE, South Central "E"*Cocoa*
 MRS. HILLARD WILLIS, Southeast "F".....*Coral Gables*

PRESIDENT'S LETTER

Dear Co-workers:

Greetings!

As your president, I attended the American Medical Convention in Cleveland, and I have a message of vital importance to pass on to each of you.

First, as members of the Medical Auxiliary, we have a specific duty to perform in defense of our country not only in this emergency but in peace time as well. By our active interest in the Nutrition classes which are being sponsored by Federal and State Governments, we can aid in safeguarding the health in our communities. It is our mission to impress on home-makers that the first line of defense is a well nourished people.

Second, we are to use our influence toward keeping the instruction regarding nutrition under the supervision of the Medical Profession.

Third, as the wives of physicians, we are the "guardians of the guardians" and as such we serve our country as surely as if we were in uniform.

We need strength of organization and I make an especial appeal to those members whose husbands are already in Government service that they keep in touch with their home Auxiliaries or attend meetings held in their vicinity. It is important that we realize our personal responsibility and at the same time



FLORIDA SANITARIUM AND HOSPITAL

located on one of Orlando's beautiful lakes and encircled by shaded lawns and orange groves, offers a cheerful, homelike atmosphere that induces rest and relaxation for the convalescent and the nervously fatigued individual seeking a quiet place. Facilities available for check-up and diagnosis, in charge of efficient, registered technicians. The daily routine includes prescribed diet, hydrotherapy and other forms of physical therapy, exercise, and social activities for those able to engage in them, and the best of nursing care by skilled professional nurses. Member of American Hospital Association. Ethical co-operation with the profession. Physicians cordially invited to visit the institution. Write for additional information.

Drawer 3673
ORLANDO, FLORIDA



Brawner's Sanitarium

SMYRNA, GEORGIA

(Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.

Approved diagnostic and therapeutic methods.

Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.

Special Department for General Invalids and Senile cases at Monthly Rates.

JAMES N. BRAWNER, M.D., *Medical Supt.*

ALBERT F. BRAWNER, M.D., *Resident Supt.*



THE HAGUE CATARACT LAMP

*An Aid To
Ophthalmic Surgery*
BY AMERICAN

Need for an efficient, safe, lightweight portable ultra-violet lamp resulted in the Hague Cataract Lamp. This new bulb type lamp, developed in collaboration with Dr. Elliott B. Hague, Ophthalmologist of

Buffalo, New York, is a welcome advance over the cumbersome, stuttering, noisy, carbon arc lamp. Its easy manipulation and handling increase its value in the operating or examination room.

BY AMERICAN OPTICAL COMPANY



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

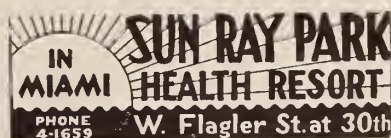
Comfortable

Convenient

Site High and Healthful

E. W. ALLEN, M.D., *Department for Men*

H. D. ALLEN, M.D., *Department for Women*
Terms Reasonable



ESTABLISHED IN 1928
REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Five
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



recognize the power which lies in the united effort of an organization devoted to the promotion of the noblest of professions.

May I say to all members that unless we keep informed and keep in touch with the purpose and program of the National Auxiliary we may lose interest in the greater possibilities of our association; therefore, I advise that each member subscribe to the Bulletin which gives "a clear picture of what is going on, what is likely to happen, and what can be done about it."

The Board meeting of the Florida Auxiliary will be held in October. The date has not been set, but all County presidents and State officers will be notified. You are urged to attend this meeting.

May we continue the constructive work of the past and also adjust our program to our country's call.

Sincerely,

(Mrs. W. J.) Ella G. Barge,
President.

ADVERTISERS' NOTES

TRY PABLUM ON YOUR VACATION

Vacations are too often a vacation from protective foods. For optimum benefits a vacation should furnish optimum nutrition as well as relaxation yet actually this is the time when many persons go on a spree of refined carbohydrates. Pablum is a food that "goes good" on camping trips and at the same time supplies an abundance of calcium, phosphorus, iron and vitamins B₁ (thiamine) and G (riboflavin). It can be prepared in a minute, without cooking, as a breakfast dish or used as a flour to increase the mineral and vitamin value of staple recipes. Packed dry, Pablum is light to carry, requires no refrigeration. Here are some delicious, easy-to-fix Pablum dishes for vacation meals:

PABLUM BREAKFAST CROQUETTES

Beat three eggs, season with salt, and add all the Pablum the eggs will hold (about 2 cupfuls). Form into flat cakes and fry in bacon fat or other fat until brown. Serve with syrup, honey or jelly.

PABLUM SALMON CROQUETTES

Mix 1 cup salmon with 1 cup Pablum and combine with 3 beaten eggs. Season, shape into cakes, and fry until brown. Serve with ketchup.

PABLUM MEAT PATTIES

Mix 1 cup Pablum and 1½ cups meat (diced or ground ham, cooked beef or chicken), add 1 cup milk or water and a beaten egg. Season, form into patties, and fry in fat.

PABLUM MARMALADE WHIP

Mix 2/3 cup Pablum, ¼ cup marmalade, and ¼ cup water. Fold in 4 egg whites beaten until stiff and add 3 tablespoons chopped nuts.

86c out of each \$1.00 gross income
used for members benefit

PHYSICIANS CASUALTY ASSOCIATION PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE



For Ethical Practitioners Exclusively
(56,000 POLICIES IN FORCE)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
--	-----------------------------------

\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	

\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	

\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

39 years under same management

\$2,000,000 INVESTED ASSETS

\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to

400 First National Bank Building • Omaha, Nebraska

Ambulance Directory

CARY HAND

32-36 Pine Street

ORLANDO, FLORIDA

Telephone 4181

COMBS FUNERAL HOMES

Ambulance Service

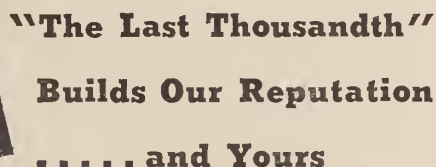
Phone 32101
MIAMI, FLORIDA

Phone 52101
MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.



THE difference between a lens that performs just as your prescription calls for and one which imposes needless strain on the patient's eye is a matter of the most minute quantities.

Top-quality products, precise shop equipment and expert workmanship alone can provide necessary accuracy. We ask only the opportunity to show you how well we can fill your requirements.

SOUTHEASTERN OPTICAL COMPANY
distributors of BAUSCH & LOMB products

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle FUNERAL DIRECTOR

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

We Carry in Stock the Forms Required by the
FLORIDA WORKMEN'S COMPENSATION ACT
 as Compiled by the Florida Industrial Commission.

- | | |
|------------|---|
| S. F. 1 | Employer's First Report of Injury |
| S. F. 2 | Surgeon's Report |
| S. F. 3 | Employer's Supplementary Report of Injury |
| S. F. 4 | Agreement as to Compensation |
| S. F. 5 | Final Compensation Settlement Receipt |
| F. I. C. 6 | Notification of Securing Compensation |

- F. I. C. 7 Employer's Notice to Reject
F. I. C. 7A Employee's Notice to Reject
F. I. C. 8 Employer's Notice to Waive Exemption
F. I. C. 9 Final Medical Report
F. I. C. 10 Employee's Notice of Injury to Employer
F. I. C. 11 Election of Employee where a Third Party is Involved

F. I. C. 12 Notice to Controvert Payment of Compensation

Office Furniture and Office Supplies - Engraved, Printed and Lithographed Stationery

THE H. & W. B. DREW COMPANY
JACKSONVILLE, FLORIDA

THE TUCKER SANATORIUM, *Incorporated*

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker,
Howard R. Masters and James Asa Shield. Department of Physiotherapy.

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association	Walter C. Jones, Miami	Shaler Richardson, Jacksonville	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest	William C. Roberts, Panama City	Stewart Thompson, Jacksonville	Tallahassee, October 2, 1941
B—North Central	Alva T. Cobb, Gainesville	" " "	Gainesville, October 3, 1941
C—Northeast	Maximilian Stern, Daytona Beach	" " "	St. Augustine, October 4, 1941
D—Southwest	Howard V. Weems, Sebring	" " "	Bartow, October 31, 1941
E—South Central	Carl D. Hoffmann, Orlando	" " "	Orlando, November 1, 1941
F—Southeast	Robert L. Elliston, Ft. Lauderdale	" " "	Hollywood, October 30, 1941
Alabama Medical Association	Samuel A. Gordon, Marion	D. L. Cannon, Montgomery	April 21-23, 1942
Georgia, Medical Assn. of	Allen H. Bunce, Atlanta	E. D. Shanks, Atlanta	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.	W. W. George, W. Palm Bch.	Kenneth Phillips, Miami	Palm Beach, Apr. 12-13, 1942
State Dental Society	I. W. Shields, Miami	W. P. Wood, Jr., Tampa	Hollywood, Dec. 8-10, 1941
Soc. of Derm. and Syph.	Wiley M. Sams, Miami	Lauren M. Sompavrac, Jacksonville	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association	J. S. Stewart, Miami	J. Ralston Wells, Daytona Beach	Daytona Beach, Dec. 4-5, 1941
State Hospital Association	Mr. Ernest G. McKay, Tampa	Mr. R. L. Martin, St. Petersburg	
Assn. of Industrial Surgeons	G. F. Oetjen, Jacksonville	Kenneth A. Morris, Jacksonville	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course	Turner Z. Cason, Jacksonville	Chairman	
Soc. of Ophthal. & Otol.	S. B. Forbes, Tampa	Shaler Richardson, Jacksonville	Palm Beach, Apr. 12-13, 1942
State Nurses Association	Mrs. M. Stetson, St. Petersburg	Mrs. Phyllis Leonard, St. Augustine	Hollywood, Nov. 2-5, 1941
Pathological Society	L. Y. Dyrenforth, Jacksonville	Iva C. Youmans, Miami	Palm Beach, Apr. 12-13, 1942
Pediatric Society	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach	Hollywood, Nov. 1941
State Pharmaceutical Association	Mr. Emmett L. Brown, Palatka	Mr. R. Q. Richards, Ft. Myers	Tallahassee, May, 1942
Public Health Association	L. J. Graves, Tallahassee	E. M. L'Engle, Jacksonville	Orlando, December, 1941
Radiological Society	John N. Moore, Ocala	Walter A. Weed, Orlando	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association	Leland F. Carlton, Tampa	W. C. Page, Cocoa	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.	Mr. E. M. Newald, Orlando	Mrs. C. R. Whitaker, Eustis	Fall, 1941
Chattahoochee Valley Med. Assn.	Herbert E. White, St. Augustine	Robert B. McIver, Jacksonville	Birmingham, 1942
Gulf Coast Clinical Society	J. S. Turberville, Century	J. C. McSween, Pensacola	Pensacola, October 16-17, 1941
S.E. Sec., Am. Cong. Phys. Ther.	Mason I. Lawrence, Atlanta	Kenneth Phillips, Miami	Memphis, May, 1942
Southeastern Surgical Congress	Irvin Abell, Louisville	B. T. Beasley, Atlanta	Atlanta, Mar. 9-11, 1942
Southern Medical Association	Paul H. Ringer, Asheville	Mr. C. P. Loranz, Birmingham	St. Louis, Nov. 11-14, 1941
Suwannee River Medical Society	E. C. Crouch, Jasper	T. H. Bates, Lake City	Lake City, December, 1941

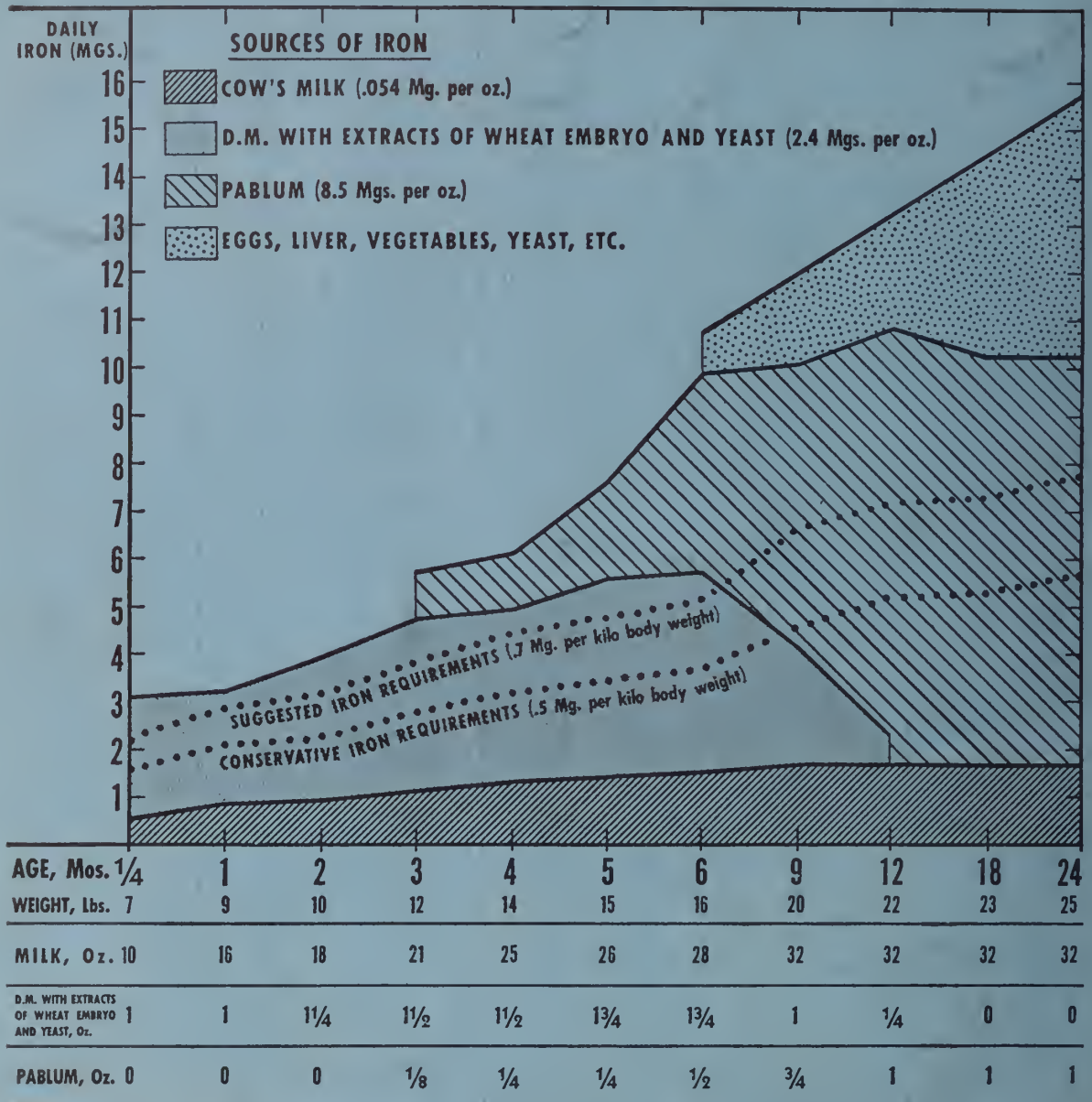
COMPONENT SOCIETIES BY DISTRICTS

	COUNTY SOCIETIES	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILORS
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	William C. Roberts, M.D. Panama City		12	10	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	W. P. Ilkxon, M. D. 24 W. Chase St. Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	43	
	Walton-Okealoosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	
	Washington-Holmes	N. J. Dawkins, M. D. Vernon	B. W. Dalton, M. D. Vernon		7	6	
	Franklin-Gulf	Thos. Merlwether, M.D. Wewahatchka	J. R. Norton, M.D. Port St. Joe	3rd Thursday	5	4	A-2-'43 C. D. Whitaker, M. D. Marianna
	Jackson *Calhoun	M. Q. Burns, M. D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
	Leon-Gadsden Liberty Wakulla-Jefferson	Sterling E. Wilhoit, M. D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	41	32	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M. D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	11	
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	100%	B-3-'43 J. M. Price, M.D. Live Oak
	Taylor *Dixie, Lafayette	Ralph J. Greue, M.D. Perry	Charles A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	
B	Alachua *Bradford, Gilchrist Union	J. Lee Summerlin, M.D. 1 Bald Bldg. Gainesville	J. Maxey Dell, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	29	20	
	Marion *Levy	Eugena G. Peek, M. D. Commercial Bk. & Tr. Bldg. Ocala	Harry F. Watt, M. D. Box 146 Ocala	3rd Thursday 12:30 P. M.	26	20	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Pasco-Hernando- Citrus	William B. Moon, M. D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	14	
	Duval *Clay, Nassau	S. R. Norris, M. D. Medical Arts Bldg. Jacksonville	F. Gordon King, M. D. 422 St. James Bldg. Jacksonville	1st Tuesday 8:15 P. M.	186	184	
	St. Johns	A. C. Walkup, M. D. East Coast Hospital St. Augustine	Charles C. Grace, M. D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	C-5-'43 Luclau Y. Dyrenforth, M.D. Jacksonville
	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganous, M. D. Palatka	2nd Tuesday in Feb., April, June, Aug., Oct., Dec. 7:00 P. M.	11	9	
	Volusia *Flagler	J. R. Chandler, M. D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Millar, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	41	
	Hillsborough	Robert G. Nelson, M. D. 712 Citizens Bank Bldg. Tampa	James S. Grable, M. D. 811 Citizens Bank Bldg. Tampa	1st Tuesday 8:00 P. M.	109	83	
	Manatee	W. E. Wentzal, M.D. Box 245 Bradenton	Wm. D. Sugg, M. D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	D-7-'43 John R. Bolling, M.D. Tampa
	Pinellas	N. W. Gable, M.D. 116th Field Artillery Camp Blanding	W. C. McCounell, M.D. 113 First Federal Bldg. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	104	100%	
D	Sarasota	John C. Patterson M. D. Palmar Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	16	
	DeSoto-Hardee-High- lands-Charlotte Glades	A. T. Elide, M.D. Laka Placid	Howard V. Weams, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	21	20	D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	M. F. Johnson, M. D. Box 1260 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	
	Polk	Bruce R. Tinkler, M. D. Laka Wales	S. Edgar Watson, M. D. Box 101 Lakeland	2nd Wednesday 1:00 P. M.	61	58	
	Bravard	T. C. Kenaston, M. D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	10	E-9-'42 Carl D. Hoffman, M.D. Orlando
	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bank Bldg. Leesburg	Clyda F. Bowlo, M. D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	20	13	
	Orange *Osceola	Frank D. Gray, M. D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	87	77	
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	10	
	St. Lucie-Okechohee- Indian River-Martin	Joseph B. Kollar, M. D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	41	38	
F	Palm Beach	Wilbur O. Arnold, M. D. Box 1785 W. Palm Beach	William E. Bippus, M. D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	61	
	Dade	C. Larimora Perry, M. D. 525 N. E. 15th St. Miami	Herbert Elchort, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	335	231	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

*Supervise and aid until organized separately.

IRON REQUIREMENTS

DURING THE FIRST TWO YEARS



During fetal life the infant accumulates iron in its body. After birth, this supply is rapidly depleted, the hemoglobin frequently dropping to 50% by the third month, especially in prematures. Neither breast milk nor cow's milk is capable of offsetting this loss, as they are deficient in iron. An infant requires one-half milligram of iron per kilogram of body weight. This chart shows that when the carbohydrate and cereal supplements contain iron, a sizeable margin of safety can be maintained,

not only during the important first six months, but throughout the first two years of life.

The excess iron thus supplied over iron requirements averages close to 75%, and is needed because some iron is unutilized—a large amount in certain cases. In rapidly growing, or poorly nourished infants, and in the presence of infection, the need for iron may be greater than the chart shows; in some cases, periodic hemoglobin determinations may show the need for iron therapy.

MEAD JOHNSON & COMPANY, Evansville, Ind., U.S.A.

The JOURNAL of the Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 3

Jacksonville, Florida, September, 1941

Yearly Subscription \$3.00
Single Copy 13c

N.Y. ACADEMY
OF MEDICINE

OCT - 1941

LIBRARY

CONTENTS

Medicine and the Florida Criminal Law, Frederick H. Dieterich, M.D., Miami	115
Pain Produced by Urologic Disease, Russell B. Carson, M.D., Ft. Lauderdale.....	120
The Use of Endocrines in the Treatment of Functional Menstrual Disorders, T. H. Wallis, M.D., Ocala.....	122
The Ways of Law and Medicine, Smith Brittingham, Norfolk, Va.	126
Editorials: District Meetings—First Series; Return Your Information Card for the Directory Promptly; Plague Control Conference; Respirators	131
Medical Licenses Granted.....	132
Births and Marriages	133
State News Items	134
Component County Societies.....	135
Abstract Department.....	135
Advertisers' Notes.....	138
Books Received.....	138
Woman's Auxiliary.....	140
Index to Advertisements.....	144
State and Sectional Meetings	146
Component Societies by Districts.....	147

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942
Southern Medical Association, St. Louis, November 10-13, 1941



For Stubborn Cases...

Petrolagar* with Cascara



Stubborn cases of constipation usually yield to Petrolagar with Cascara.

This preparation provides sufficient laxative effect to help restore normal bowel habit in chronic cases, yet it is mild enough for use in obstetrical cases. Each tablespoonful contains 13.2% of non-bitter aqueous extract of Cascara Sagrada.

The dose of Petrolagar with Cascara is one tablespoonful two to three times daily—gradually diminished. It has the advantage of exceptional palatability and continued effectiveness despite prolonged use.

Petrolagar with Cascara is available in 16 ounce bottles at all pharmacies and in the special Hospital Dispensing Unit at hospitals.



*Petrolagar—The trademark of Petrolagar Laboratories, Inc., for its brand of mineral oil emulsion—liquid petrolatum 65cc. emulsified with 0.5 Gm. agar in a menstruum to make 100 cc.

KOROMEX DIAPHRAGM



KOROMEX TRIP-RELEASE INTRODUCER

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH

PALM BEACH



SITE OF THE

Florida Medical Ass'n Convention

APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONY PLAZA

AT PALM BEACH—

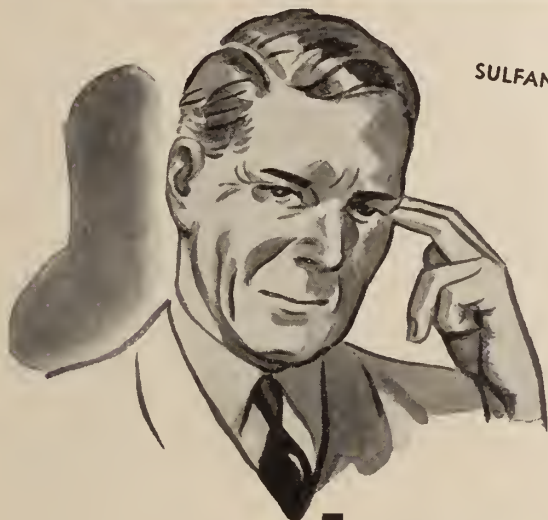
PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

Do You Know Your SULFONAMIDES?



SULFANILAMIDE

WHICH SHALL I USE
FOR GONORRHEA?

SULFAPYRIDINE

WHAT'S GOOD FOR "STREP"?

SULFATHIAZOLE

WHICH PRODUCES
BEST RESULTS
IN PNEUMONIA?

MY PATIENT HAS A "STAPH"
INFECTION—WHAT SULFONAMIDE
IS MOST EFFECTIVE?

The sulfonamide compounds continue to grow in importance. Three separate drugs have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. Another has been submitted for acceptance. We present on this page the "box score" on three "sulfa" drugs now in widespread use.

	Sulfanilamide N.N.R.	Sulfapyridine N.N.R.	Sulfathiazole N.N.R.
CHEMICAL NAME	(p-amino-benzene sulfonamide)	(2-sulfanilyl aminopyridine)	(2-sulfanilyl aminothiazole)
SOLUBILITY in 100 cc. of water at 37.5° C.	1480 mg.	54 mg.	96 mg.
PHARMACOLOGY Absorption	Relatively uniform and rapid.	Irregular and often poor.	Uniform—very rapid.
Distribution	In all body fluids.	In all body fluids.	In blood but poorly in other body fluids.
Excretion	Rapid.	Slower than Sulfanilamide.	Rapid.
Tendency to conjugation.	Slight.	Marked.	Moderate.
CHEMOTHERAPY ★ Preferred Drug. ● Also Effective.			
Colon Bacillus			★
Dysentery Bacillus			●
Gonococcus		●	★
Lymphogranuloma Venereum	●	●	★
Meningococcus	●	★	●
Pneumococcus		★	★
Staphylococcus		●	★
Streptococcus	★	●	
HOW SUPPLIED BY SQUIBB Tablets	5 grain in bot. of 100, 500, 1000. 7½ grain in bot. of 25, 100, 1000.	0.5 gram in bot. of 50, 100, 1000.	0.5 gram in bot. of 50, 100, 500, 1000.
Powder	4 oz. Rx. bottle.	5 gram vials.	
Crystals	1.0 gram ampuls, box of 5 and 25.		5 gram vials.
Capsules		0.25 gram in bot. of 50, 100, 1000.	

Specify
SQUIBB
sulfonamides

When you think of SULFONAMIDES
... think of SQUIBB

Fit for Beauty

"THE most important development in rimless eyewear since Loxit."* Thus practitioners across the country hailed Numont Ful-Vue in Loxit.* Today, after three years, it still leads the style parade. Patients who "never before would wear glasses" are thrilled at the trim beauty of Numont Ful-Vue in Loxit.*

*Loxit—the Bausch & Lomb screwless mounting.



SOUTHEASTERN OPTICAL COMPANY
distributors of **BAUSCH & LOMB** products



Brawner's Sanitarium

SMYRNA, GEORGIA
(Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.
Approved diagnostic & therapeutic methods.
Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.
Special Department for General Invalids and Senile cases at Monthly Rates.
JAMES N. BRAWNER, M.D., Medical Supt.
ALBERT F. BRAWNER, M.D., Resident Supt.

86c out of each \$1.00 gross income used for members' benefit

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

Hospital, Accident, Sickness



INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

39 years under same management

\$2,000,000 INVESTED ASSETS
\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members
Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to
400 First National Bank Building
OMAHA, NEBRASKA

*Prompt, pronounced action
in treatment of*

MALARIA

THE EFFECT of Atabrine dihydrochloride upon malarial parasites is manifested so speedily and so thoroughly that treatment with this chemotherapeutic agent has been aptly described as a "short cut to recovery."

Not only are patients incapacitated for a much shorter time than formerly, but anemia, splenomegaly and other chronic complications of malaria are largely prevented.

Because of its potency the dose of Atabrine dihydrochloride is small—ordinarily only $1\frac{1}{2}$ grains three times daily for from five to seven days.

HOW SUPPLIED: Tablets of 0.1 Gm. ($1\frac{1}{2}$ grains), tubes of 15 and bottles of 25, 100 and 500; sugar coated tablets of 0.1 Gm. ($1\frac{1}{2}$ grains), bottles of 25, 100 and 500; tablets of 0.05 Gm. ($\frac{3}{4}$ grain), bottles of 50 and 500. Also ampules for injection in cerebral and pernicious types of malaria.



Write for illustrated booklet

ATABRINE

Reg. U. S. Pat. Off. & Canada

Brand of CHINACRIN



DIHYDROCHLORIDE

Methoxychlor-diethylaminopentylamino-acridine dihydrochloride

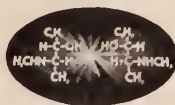
CHEMOTHERAPEUTIC SPECIFIC AGAINST MALARIA

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician **NEW YORK, N. Y. • WINDSOR, ONT**

RACÉPHEDRINE

in Fall Pollinosis



When efforts at desensitization have failed or been only partially successful in relieving hay fever or asthma, well-planned symptomatic treatment may bring welcome relief.

Solution Racéphedrine Hydrochloride (racemic ephedrine) is a reliable decongestant when applied to the nasal mucous membranes. Capsules Racéphedrine Hydrochloride may be given to prevent attacks and ameliorate their severity.

RACÉPHEDRINE HYDROCHLORIDE (UPJOHN)

Supplied in the following forms:

Solution Racéphedrine Hydrochloride (Upjohn)
1% in Modified Ringer's Solution, in one ounce dropper bottles for prescription purposes, and in pint bottles for office use

Capsules Racéphedrine Hydrochloride (Upjohn),
¾ grain, in bottles of 40 and 250 capsules

Powder Racéphedrine Hydrochloride (Upjohn),
in ¼ ounce bottles



Upjohn
KALAMAZOO, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

KARO FORMULAS FOR PREMATURE AND DEBILITATED INFANTS

DILUTE MIXTURES

Evaporated milk. 4 ozs.
Water, boiled. 12 ozs.
Karo. 1 tbs.
2 ozs. every 3 hrs. for 8 feedings

Lactic Acid milk (dried) 5 tbs.
Water, boiled. 16 ozs.
Karo. 1½ tbs.
2 ozs. every 3 hrs. for 8 feedings

CONCENTRATED MIXTURES

Breast milk. 12 ozs.
Evaporated milk. 4 ozs.
Karo. 1 tbs.
2 ozs. every 3 hrs. for 8 feedings

Lactic Acid milk (2%) . . 16 ozs.
Karo. 2 tbs.
2 ozs. every 3 hrs. for 8 feedings

FEEDING PROGRESS

Days of Age	Drams at Each Feeding	Ounces of Feeding per 24 Hrs.
1	1	1
2	2	2
3	4	4
4	6	6
5	8	8
6	10	10
7	12	12

(8 drams = 1 ounce)

"**M**OST of the common milk mixtures have been used at various times with some degree of success—evaporated, acid and dried milks, and butter-flour mixtures. Those high in protein and carbohydrate and low in fat are the most suitable in concentrated formulas properly adapted to the limited digestive capacity of the premature. While lactic-acid milk with addition of 7 to 10 per cent by volume of Karo syrup yields twenty-five to thirty calories per ounce, evaporated milk with 5 to 10 per cent added Karo syrup is equally effective.

Processed or acid milks are advantageous because of the fine curds produced, the premature being particularly susceptible to curd indigestion. Nonfermentable carbohydrate in quantities similar to those used in normal feeding of infants may be added to any of these milks. The formula may be concentrated by decreasing the water, or adding powdered protein milk in place of extra amounts of sugar."

KUGELMASS: "Newer Nutrition in Pediatric Practice."

CORN PRODUCTS SALES COMPANY

17 Battery Place, New York City



Cigarette information worth knowing*

*Philip Morris do not claim to cure
irritation but they do say this:*

62.3%

of the cases of irritation of the nose
and throat due to smoking cleared
completely on changing to Philip
Morris.

37.7%

the balance, showed definite improve-
ment.

100% benefited

**From tests reported by Laryngoscope,
Feb. 1935. Vol. XLV, No. 2, 149-154*

PHILIP MORRIS & CO., LTD., INC., 119 FIFTH AVENUE, NEW YORK



Symptomatic Control of Hay Fever and Asthma with . . . Propadrine Hydrochloride

How Supplied . . .

CAPSULES:	$\frac{3}{4}$ grain—bottles of 25, 100 and 500; $\frac{1}{4}$ grain—bottles of 25, 100 and 500.
ELIXIR:	Each fluidounce contains 2 grs. 'Propadrine' Hydrochloride. In pints and gallons.
SOLUTION (Aqueous):	1% (isotonic)—1-ounce and pint bottles; 3%—1-ounce and pint bottles.
NASAL JELLY:	In $\frac{1}{2}$ -ounce tubes containing 0.66% 'Propadrine' Hydrochloride.

Sharp & Dohme

RAGWEED and other fall weeds now cast a shadow across the lives of countless thousands of "hay fever" victims.

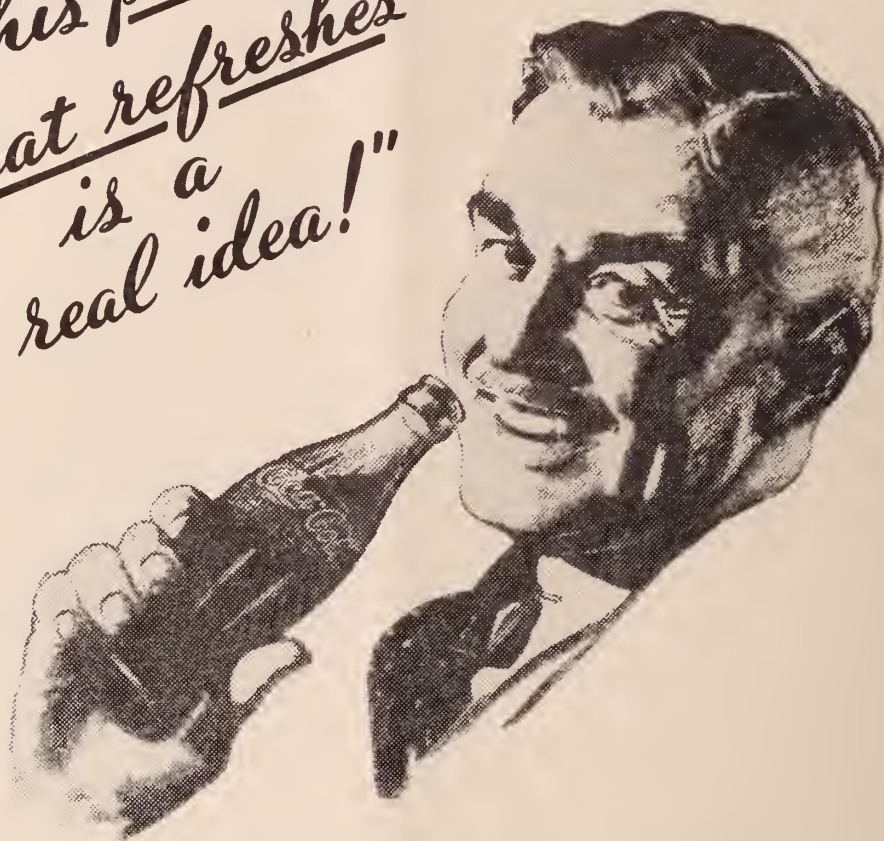
In the symptomatic control of this allergic condition, 'Propadrine' Hydrochloride has been found particularly advantageous in providing immediate relief from annoying coryza and other vasomotor symptoms. It is therapeutically as effective as ephedrine and its pharmacological action is similar, but its advantages in the symptomatic control of hay fever and asthma are manifested particularly by:

1. the comparative absence of side-effects such as insomnia, nervousness, and excitation.
2. simultaneous administration of sedatives is usually obviated.
3. may be administered in therapeutic dosage over long periods of time.

'Propadrine' Hydrochloride (phenyl-propanol-amine hydrochloride), because of its bronchodilator action, affords relief to many asthmatic patients when administered in $\frac{3}{4}$ -grain doses every three hours. This may be increased to $\frac{1}{4}$ grain every three hours in adults and in children over eight years of age without untoward effect.

Solution 'Propadrine' Hydrochloride is also of value in allergic rhinitis with associated edema of the nasal mucous membrane, as it produces a rapid and sustained vasoconstricting effect on the engorged tissues.

*"This pause
that refreshes
is a
real idea!"*



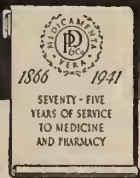
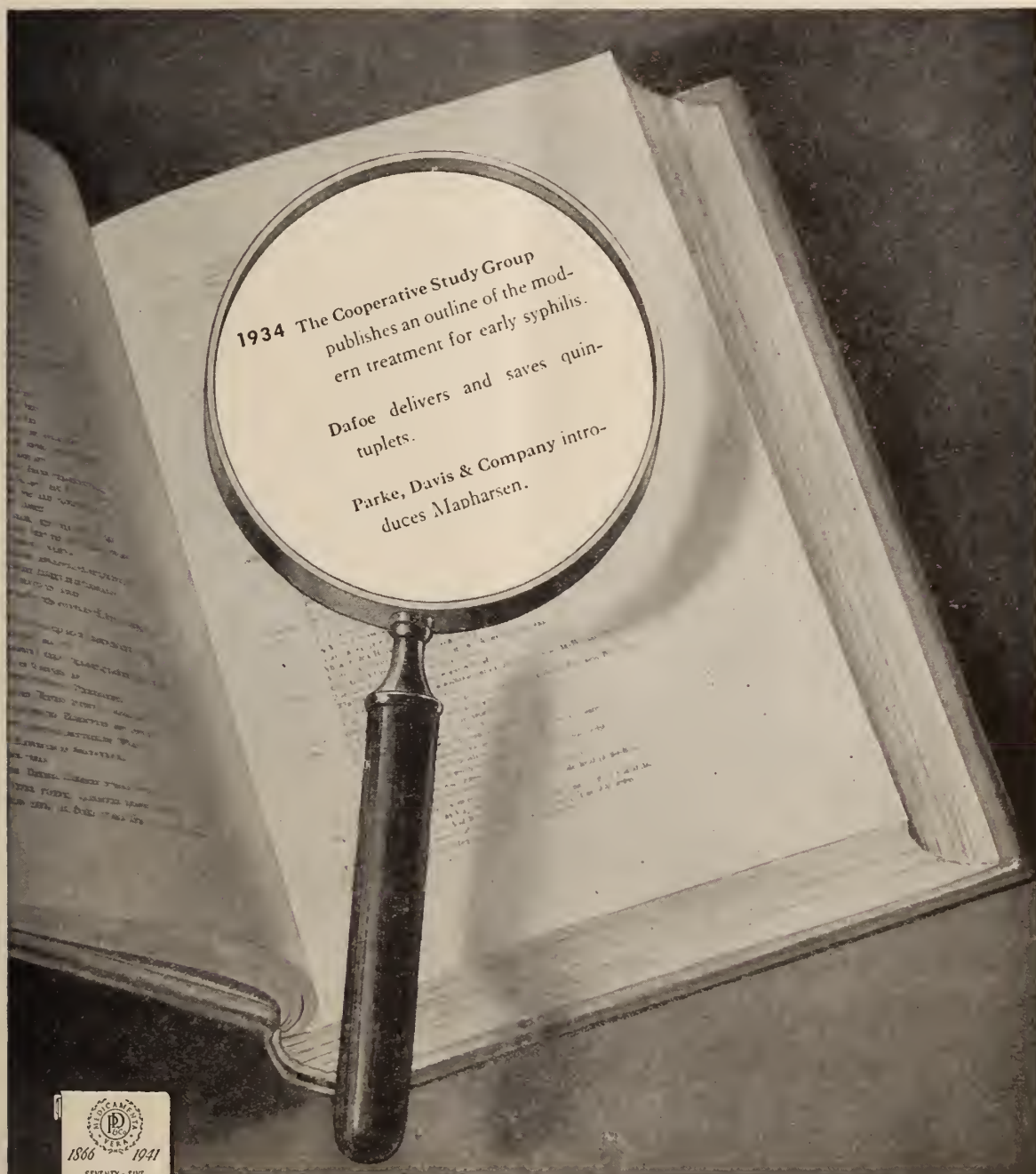
Ice-cold Coca-Cola, — pure, wholesome and delicious, — has made *the pause that refreshes* America's favorite moment. Everybody welcomes the refreshed feeling,— the happy after-sense of complete refreshment Coca-Cola always brings.



THE PAUSE THAT REFRESHES

These names, these years have helped make modern medical history

One of a series of advertisements commemorating three-quarters of a century of progress and achievement



PARKE, DAVIS & COMPANY

PIONEERS IN RESEARCH
ON MEDICINAL PRODUCTS

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

SPECIALTY

Knowing how to get things done has been this country's specialty. The men and women associated with Eli Lilly and Company have the habit of constantly improving products, facilities, and operations in all departments of the business. On this happy faculty depends the excellence of Lilly products.

FOR PROLONGED EFFECT Protamine, Zinc & Iletin (Insulin, Lilly)



The outstanding advantage of Protamine, Zinc & Iletin (Insulin, Lilly) is its prolonged blood-sugar-lowering effect, lasting at least twenty-four hours. Use of Protamine Zinc Insulin in selected cases of diabetes permits a reduction in the number of injections required daily and corrects the nocturnal hyperglycemia common in severe cases, thus bringing patients another step closer to normal living.

ELI LILLY AND COMPANY

Principal Offices and Laboratories, Indianapolis, Indiana, U. S. A.

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, September, 1941

Number 3

MEDICINE AND THE FLORIDA CRIMINAL LAW

FREDERICK H. DIETERICH, M. D.
MIAMI

Medicine and law, both dealing intimately with human relationships, are bound to have numerous interrelationships. There is, for instance, that wide range of associations called medical jurisprudence, which is the application of the principles of law to medicine. It includes not only the subject of our present discussion, but also the legal aspects of the physician's relationship to his patients, his colleagues and the state as well. This discourse, however, deals chiefly with a review of the assistance that medical science and judgment can render the legal authorities in the detection of crime and the administration of justice, and in criminal legal procedures. I refer specifically to six general types of cases:

1. Cases of sudden death with the person in apparent good health.
2. Cases in which the person dies without a physician attending during the last illness.
3. Deaths owing to foul play or in which there is a suspicion of foul play, and those occurring in an unusual manner.
4. Deaths from casualty, such as automobile or occupational deaths.
5. Suicides.
6. Deaths in prisons.

In other words, I shall discuss the present coroner system and contrast it with the medical examiner system. Although the unsatisfactory handling of medicolegal matters under the coroner system has been recognized for many years, it is only comparatively recently that decided changes have been made in various parts of the nation. In the state of Florida archaic methods continue to be employed. Efforts have been made in some of the larger communities to overcome these inadequacies, but no uniform improvement has resulted. The object then of this paper is to discuss these methods and to suggest how improvements can be made.

There is no more fitting place to discuss matters of public interest intimately associated with medicine than in the medical societies. The public looks to the medical profession for guidance in such highly specialized fields and expects it to advocate policies and urge changes when they are desirable. Examples of this support occur in its relation to public health organizations, periodic health examinations and wise provisions for medical care in illness and accident.

If a death included under one of the six categories listed occurs, the coroner, a layman, is informed; he may then make the diagnosis and sign the death certificate. Upon critical scrutiny everyone in the practice of medicine and law can see the glaring inadequacies of this system. In spite of the criticism heaped on the office of the coroner and justice of the peace, there are many excellent and conscientious men filling the position. My critical observations are not directed against these officeholders in general and least of all against any one in particular. My aim is simply to present an analysis of the coroner system in contrast to the medical examiner system from the standpoint of a physician many years in contact with this phase of medical science.

The coroner, whose name is derived from the word 'crown,' is a product of the old English law transplanted to the American colonies. Originally, his function was to represent the Crown in general, and specifically to see that monies, such as taxes and fines due the king, were properly handled and found their way into the royal coffers. He was more an administrative officer, with some judicial functions. These judicial functions gradually assumed more importance as his duties led him to inquire into the deaths in which there was some question as to the possibility of infraction of the law. This postmortem investigative function in time took precedence over his other duties. In smaller communities, his duties were combined with those of a lower magistrate or justice of the peace, because these deaths were too few to warrant the creation of an office exclusively for their investigation.

When a coroner's case has criminal aspects, as in a frank murder or an abortion, the local police or the state investigator takes charge. In this state an additional complication arises at this point as capital offenses are prosecuted by the state attorney assigned to the district, who has a state criminal investigator to assist him, not a physician, but a man trained in detective work. For lesser crimes or suspicion thereof, the county solicitor has jurisdiction. It is only the coroner or the state investigator who can give permission to move the body in these cases.

Arriving at the scene, how does the coroner make his decision as to the cause of death? He reaches a conclusion (1) aided by his own knowledge and judgment, with or without medical advice, (2) by inquest, and (3) after an autopsy is performed.

In the first instance, there are cases, such as those incident to automobile accidents, in which he can sign the death certificate without the help of a physician. In point of fact, in no case does the law specify that he must consult a physician, except when in his own judgment he decides it is necessary. One can readily see how accidents, under overwhelmingly strong attendant circumstances, could by a layman be mistakenly held responsible for death. A body is found at night at the side of the road with head blood-encrusted and crushed; to all intents and purposes it was struck by a "hit and run" driver's automobile. The case may be signed out as such, but a thorough examination of the nude body may disclose the more important fact of a stab or bullet wound in the back, with perhaps the corpus delicti still present. The average layman has not the insight, the training and the viewpoint of a medical man, and in these cases, the medical aspect is the all important one. In some communities, the objection to a layman as coroner is partly overcome by requiring the medical degree as a qualification for office. I shall discuss this doubtful improvement later.

When the coroner deems it necessary or wise, he may get help by impaneling a jury. The determination of the cause of death by a coroner's inquest or jury is even more irrational than its determination by the coroner alone. As the number of laymen making the diagnosis is increased, the lack of knowledge is thereby multiplied if there is no competent

physician to present adequately the medical side of the question.

The third means of establishing the cause of death by the coroner is by autopsy. The body of a recluse is found in bed; there is no disorder in the room, suggesting a scuffle; neighbors saw the deceased apparently well the evening before. He is supposed to have died of cardiac disease, but a careful medical examination would possibly disclose the marks of a hypodermic needle on the arm or thigh with death caused by an overdose of morphine administered accidentally by the victim, secretly an addict, or perhaps purposely taken with suicidal intent, or even administered by another with murderous intent. The toxicologic examination reveals further facts in the otherwise simple death owing to "heart disease." What an important bearing it may have for the insurance companies issuing certain types of policies is self-evident. Much information is obtained by a medical examination at the scene and later by a thorough autopsy in a properly equipped laboratory.

In discussing these three avenues open to the coroner I have referred to the physician usually called in to assist him in determining the cause of death. Here is another feature of the weakness or inadequacy of the present system. Just because a man has a medical degree is no reason why he can set himself up as an otolaryngologist, a medicolegal expert or a specialist in any other field. What happens is that any physician is called in, usually one busy with a general practice, who has rarely if ever performed an autopsy and who just happens to be politically well connected or, mayhap, his political support is thus wooed with the twenty-five dollar fee for doing a job he is neither trained to do nor has interest in doing for he usually detests it. True, every physician can cut and carve a cadaver, but has the "carver" the ability, background and interest to determine the importance of and correctly interpret the findings? The great objection to appointing or electing a candidate as medical examiner or coroner whose sole qualification is his medical degree, is thus apparent.

It is for the reasons named and many others that a large number of communities have made a change from the old coroner system to the medical examiner system. Furthermore, it has been definitely shown that the cost of

the medical examiner system to the community is much less even though the results are far superior. What has been done in some communities in this regard is of particular interest.

The oldest medical examiner's office in America is that of Massachusetts. Practically, this medical examiner system has operated with efficiency even though the system contains inherent faults. Apparently the governor has the sole power to appoint a medical examiner and he has made good appointments in most cases, but there is nothing in the law which insures that the physician with the best qualifications will be selected for the position. Also, the limitation of the medical examiner's investigation to cases of suspected violence and the further proviso that he cannot perform an autopsy unless he is duly authorized by the district attorney, necessarily hamper the medical examiner in his investigations.

The charter of the city of New York definitely insures that the chief medical examiner is to be sufficiently expert in medicolegal science and that he cannot be removed arbitrarily from his position. His office is kept open at all times during the day and night on every day of the year, with a clerk in constant attendance. When a death, included under the six categories previously listed, is reported to the office, it must be investigated by the chief medical examiner or his assistant at the earliest opportunity. The medical examiner visits the scene of death, takes down all essential facts concerning the circumstances of death and examines the body at the scene. If in his opinion an autopsy is necessary, he or some other medical examiner performs it. The medical examiner has no judicial powers, so that the testimony which he hears has only the significance of an affidavit. The district attorney can issue a subpoena to the medical examiner to testify in court concerning his findings; however, he is not in a position to influence the testimony of the medical examiner, either directly or indirectly, and this particular relationship favors impartial and unbiased testimony on the part of the medical witness. It is my firm belief that the most successful examples of the medical examiner system in the future will be founded on the same principles as those which form the basis of the system used in New York.

Of especial interest is the recent change from the coroner system in Maryland. Two years ago the office of coroner was abolished in that state. The examiners must have a medical degree and at least two years' post-graduate training in pathology. For counties outside of Baltimore the commission appoints deputy examiners. They must be licensed physicians, not necessarily pathologists, who make preliminary examinations. If necropsy or other special examination is necessary, a medical examiner of Baltimore performs this function.

Before proposing changes in the medicolegal system of the United States one should become acquainted with the European medicolegal institutes. Since one person can hardly be expert in pathology and also in psychiatry, it would seem wise, in this country, to let medicolegal pathology develop in closest association with pathologic anatomy and not attempt to embrace all the contacts between law and medicine under one head.

During a recent stay in New York I had an excellent opportunity to study, at first hand, the medical examiner system of Nassau County, Long Island. The situation there is more nearly comparable to that of Florida and the medical examiner system more applicable to the counties here, separately or in groups, than are others. The work centers in the county hospital, where the medical examiner not only has his headquarters, but also has the use of the hospital's laboratories and its expert technical staff, thus improving the quality of work of both institutions although lowering its cost.

To the exclusively criminologic aspect of the medical examiner system should be added the important feature of an unbiased independent fact-finding agency, gathering evidence and submitting competent expert testimony in civil suits and controversial cases pertaining to insurance and compensation in which death has resulted. The specialist in charge supervises, in his laboratory, such highly specialized tests as determinations of paternity. Furthermore, the functions of the medical examiner are of great importance from the standpoint of correct vital statistics. He is associated with the health officer not only in regard to accurate death certificates, but also in exposing conditions inimical to the public health, for example, carbon monoxide and food poison-

ings, and infectious and contagious diseases. Typhoid and yellow fevers are particularly important considerations now in aviation centers. Other ramifications are the association with automobile accidents and traffic regulations, and also courses for the police in which they are taught the essentials of the medical indications of crime.

I would not pose for a moment as offering something perfect, but what has been considered under the medical examiner system is so far superior to the coroner system that I strongly advocate its adoption in this state. Just what form it should take is a matter to be worked out in detail. Ultimately it must come. Why not now?

7627 Biscayne Blvd.

DISCUSSION

DR. CLAYTON E. ROYCE, Jacksonville:

The speaker brought to us this morning a new rule of reform. Any reform upsets the status quo, and as he has well shown, the status quo in this instance carries a definition which was given to it by Paddy. Paddy fell heir to a set of legal books, and whereas previously he had earned his living by digging ditches, he began to dispense law. Paddy was called upon by a young fellow who had had a case in the hands of a lawyer for some time; every time he inquired about it, he was informed that it was in status quo. He came to Paddy to find out what a status quo was. Paddy finally said, "Well, you are in a hell of a fix." So it is with this situation of handling deaths and explaining before the law just what the cause of death is. Those who undertake this work should be especially qualified for it. They must understand the necessity for establishing an unbroken chain of events between the time of death and the time of the trial. They must understand the necessity for examination at the site. They must understand the importance of the position of the body at the time of death and of ascertaining how long death has existed. These factors are not regularly brought out when the person examining the body is not an especially trained and qualified person for that purpose.

Now, why should the medical profession interest itself in a matter to be taken care of by the legal profession? It seems to me that both professions have an interest here. There will be presented at this session of the legislature a bill to establish a better system for conducting the examination of bodies found under circumstances outlined by the speaker. Another reason, and it seems to me the prime reason, why the medical profession should interest itself in this matter is because of the opportunity for placing organized medicine before the public. We are sliding into socialized medicine, and we need to grab hold of everything we can to make our position more solid with the public. Testimony before the courts, conflicting testimony by so-called medical examiners, is a matter for ridicule in the eyes of many newspaper editors. There is too much conflict of testimony.

I recall an answer made by a physician in Chicago who filled the office of coroner for many years very satisfactorily. A young surgeon, who was a friend of mine, wanted to spend his vacation going around with this physician in order to take part in the work and thus acquaint himself more thoroughly with the anatomy and pathology encountered. He was refused the privilege. The physician said, "I honor and respect your desire to improve your mind, but you must remember that I go

before the court. If two or more take part in an autopsy, there will arise a difference of opinion, a very natural difference of opinion, which in the eyes of the jury may lead to a grave miscarriage of justice."

That seems to me to be one of the most important reasons why we should lend support to measures before the legislature to improve the system of examination after death under suspicious circumstances.

DR. L. V. DYRENFORTH, Jacksonville:

Dr. Dieterich's paper should be of much interest to the medical profession in general as well as to the pathologists and law enforcement officers. I think it should call for a good bit of discussion and interesting questioning on the part of everybody.

The general rule, as Dr. Royce has said, is to approach the matter from a slightly different angle. Dr. Royce chose for his discussion, I am glad to say, a phase of it which has been poorly stated in the medical literature in my estimation. Until recently there was not much of a routine examination conducted; just a brief report was made. Now the case of the county medical examiner versus the coroner system is becoming more and more an issue in medicolegal work in general involving autopsies.

The Southern Medical Journal last year called for and published a little symposium consisting of three articles, and I think the pathologists have surely read them. They have been abstracted in three numbers of the Journal of the American Medical Association. The first one was written by Dr. George Graham and was called "Medicolegal Toxicology." The second one was entitled "Some Medicolegal Aspects of Alcoholic Intoxication" and was written by Dr. F. C. Helwig. The third article was called "The Medicolegal Autopsy," and the author was Dr. R. D. Baker. All three are excellent articles, particularly "The Medicolegal Autopsy," which deals largely with the present subject.

I should like to remind Floridians that there has been a medical examiner in Duval County for about twenty years, a very competent medical examiner, Dr. Ray Killinger. It is his idea and mine that medicolegal autopsies should be performed with proper supervision, particularly in a city like Jacksonville in which the homicide rate is unfortunately one of the highest in the country. I think the rate is second, third or fourth in the United States. We residents are not proud of that record, but it exists just the same. About 49 per cent of the city's population is negro. The situation really calls for two kinds of medical examination, and I think that some such solution might well be kept in mind. Dr. Killinger and I do a considerable number of outside postmortems besides the ones in the hospitals. Many of them are in connection with medicolegal insurance cases. Dr. Killinger is, I feel, competent and well equipped to make a medicolegal postmortem examination. I have seen his work, and he has accumulated a record of 2,500 or more autopsies to his credit during the time I have known him. Since he has been county medical examiner, the system, although it is not the finest setup that one could ask for, has certainly been better than the old coroner system.

The other type of autopsy is that which is now called the clinical autopsy. We usually do that in the hospital. There it overlaps the type of medicolegal autopsy having to do with deaths by violence, because diseased conditions as well are encountered, which, we might say, are part of the natural causes. So much for generalities.

I think Floridians have a great deal to look forward to. We here are a little bit better off and have not been burdened with the shortcomings of the coroner system.

The present situation has been touched on by both Dr. Dieterich in his paper and Dr. Royce in his discussion. The Rockefeller Foundation undertook in 1928 to publish an organ dealing with the European method of handling medicolegal work. In France, particularly in Paris, medicolegal investigations have been very highly developed, much more so than in any other country in the world including Russia. The French have a special

police department just to handle medicolegal investigations. There is one in England also, and there are a few in the United States. This subject was brought to the fore in this country in the nineteen twenties by Dr. McNally of Chicago. A great deal of work had already been done, but he popularized it. I have visited his laboratory in the Cook County Hospital in Chicago. It is in the main building and is very thoroughly equipped. The county employs a number of coroner's physicians who handle something like 5,000 autopsies a year, 2,500 in the Cook County Hospital alone. They have developed a very nice system of conducting these investigations, and they are careful and painstaking with every postmortem that they do.

The final thing I should like to touch on is the symposium previously mentioned, Dr. Graham in his article, "Medicolegal Toxicology," described an ideal setup in the state of Maryland. The other two articles deal with similar subjects. All of them, I think, bear out the intent of Dr. Dieterich's message very ably.

DR. CARLOS P. LAMAR, Miami:

Just as a matter of information, I happen to be originally from Havana, Cuba, and I thought it might be interesting to the members of the Association to know a little about the way these problems were handled there, at least until five years ago as I have been absent since then.

First, in Cuba it is required by natural law that in all cases of death occurring from unnatural causes the body be subjected to postmortem examination. It is not left to the decision of the judge or coroner's jury whether an autopsy should be performed or not, if at all. In every instance of death in which medical attention has not been given for a period of at least forty-eight hours prior to death, even when the physician feels able to diagnose the cause of death, a postmortem is obligatory. It is already a law, and there is no resistance to it. The number of autopsies is usually very high. I have heard J. Edgar Hoover, Director of the F. B. I., say that Cuba has one of the best equipped departments of forensic medicine in the world. That statement may sound like a boast, but it so happens that there are men in that department who have made as their life's work the study of forensic medicine. They have a completely equipped toxicologic laboratory and a completely equipped autopsy department with many very competent physicians devoting their entire time to forensic medicine. The Director, Dr. Israel Castellanos, is internationally known.

It is not yet a law in Cuba, but I understand that the government expects to pass a law there very soon placing the department of forensic medicine in the hands of physicians who are especially qualified for this work and who will do no other type of work but forensic medicine. These requirements are actually being met at the present time, although the law has not yet been passed.

In the department of medicolegal or forensic medicine, as it is called in Havana, a very competent person reports on every autopsy. When an autopsy is performed in any part of the island, it is required by law that all viscera shall be extracted at least in part and sent to the central laboratory at Havana, where every possible examination that can be made is routine. It is done in every case whether it is needed or not. In all cases interesting and competent information is obtained for the courts, and in every instance of death not satisfactorily proved to be owing to natural causes there is a trial, which the forensic physicians have to attend and for which they must render competent autopsy reports. Some of those reports become classics in the forensic medical literature.

I think it interesting to know that so close to our shores there is a place where a little bit of information can be obtained regarding forensic medicine.

DR. JAMES N. PATTERSON, Jacksonville:

Dr. Wm. H. Pickett, State Health Officer, was asked to discuss this paper but, as he is attending the State and Territorial Directors' Convention in Washington this week, I am substituting for him. I agree with

everything Dr. Dieterich has said. For four years, while I was a member of the Department of Pathology in a large general hospital connected with a medical college, I performed all the autopsies for the coroner of that county, which had a population of nearly a million people. We had as ideal a setup as it is possible under a coroner's system, but it was far from perfect. We had no toxicologic laboratory of our own, and had to depend upon the city chemist or the chemistry department of the medical college. Naturally they had their own work to do and our requests were of secondary importance to them. Consequently, toxicologic examinations were performed only when especially indicated.

The main trouble with most coroner systems, as has been so ably presented by Dr. Dieterich, is that the office is elective and is only a part-time position. The coroner has to be more or less a politician, far more of a politician than a physician. His tenure of office is usually for two years and then he comes up for re-election. Because the term is short and the position is only a part-time one, the coroner has little incentive to put forth the effort necessary to build up a good department. Under the medical examiner system the examiner is a physician particularly trained for this work and is subsequently re-appointed at the expiration of his term unless there is a just reason for his removal.

I think the recommendations embodied in this paper should be taken up with the Legislative Committee of the Florida Medical Association and if this committee sees fit, should be endorsed.

I wish to compliment Dr. Dieterich on his excellent presentation of this timely topic.

DR. HARRISON A. WALKER, Miami Beach:

It may seem just a little strange to some of the members that I should discuss this paper since I am not a pathologist and am not interested in autopsies other than from a scientific standpoint. But I think that this paper is one that deserves comment and consideration.

There are many different forms of government that certainly are in need of changes. I feel that the state could well give due consideration to the organization of a system of medical examiners in preference to the coroner system as outlined by Dr. Dieterich.

The particular point that I want to mention is that the lay coroner in my community happens to be the justice of the peace. Many times my colleagues and I have occasion to see cases coming under one of the classifications that Dr. Dieterich mentioned, and we need to have an autopsy performed before signing the death certificate. In some instances this is refused although we say that we cannot or will not sign the death certificate since we do not know the cause of death. If we demand an autopsy, the coroner or justice of the peace, in certain instances, for political reasons or reasons best known to himself, does not see fit to order it. I think that under these circumstances he is the one who should sign the death certificate. There is a way, however, in which we can get around this particular difficulty, but it is rather cumbersome. We can appeal to the appellate judge as he can order an autopsy. Nevertheless, that is rather a roundabout way to get such a thing done.

I also want to call attention to the fact that we have to perform a certain percentage of autopsies in private hospitals in the undertakers' establishments. That may, many times, account for the percentage being low.

I think that Dr. Dieterich and his associates are to be commended highly.

DR. DIETERICH (concluding):

The only question that remains is: What can this organization do about it? The answer is twofold: (1) Each member should discuss this matter with the laity interested in public affairs, and particularly with the legislative representatives from his community. (2) The Association, through its Committee on Legislation and Public Policy, should work with the state legislature to make necessary changes in the law in order to institute the medical examiner system.

PAIN PRODUCED BY UROLOGIC DISEASE

RUSSELL B. CARSON, M. D.
FT. LAUDERDALE

Pain brings the patient to the physician in a vast majority of cases. This symptom is the most important subjective evidence of disease, and in approximately 90 per cent of all diseases it develops at the onset or at some later time. Consequently, if one is able properly to interpret and evaluate pain, much is thereby accomplished. In diseases of the urinary organs, pain, pyuria, hematuria and tumor are the cardinal symptoms, of which pain is the most prominent.

Persons differ widely in their perception and interpretation of pain, and for this reason some insight into the individual patient's response to it is necessary. Also, it is important to determine whether it is burning, gnawing, cutting, lancinating, shooting, griping, sharp, dull, aching or tearing in type. Is the pain constant, remittent or intermittent in its presence? What is its location, and is there radiation or spreading from the site of primary origin?

Consideration of the nerve supply of the various urinary organs materially aids interpretation of the pain produced by urologic lesions. The following brief outline serves the present purpose:

Perirenal Area.....	Tenth thoracic to first lumbar spinal segments. (Local).
Renal Capsule, Pelvis and Ureter (upper portion)	Renal plexus and associated sympathetic nerve supply. (Local and referred by way of the tenth, eleventh and twelfth thoracic segments and the first lumbar segment.)
Renal Parenchyma	Insensitive.
Ureter (lower portion)	Inferior mesenteric, hypogastric, spermatic (ovarian) plexuses. (Local, bladder neck, thigh, scrotum).
Bladder	Hypogastric plexus and related parasympathetic nerve supply. (Local, urethra, glans, sacrum, thighs).
Urethra, penis and scrotum	Second, third and fourth sacral segments. (Hypogastric plexus to erectile tissue). (Local).
Testes and Epididymes	Mesenteric, renal and hypogastric plexuses. (Local and renal region).

Preceding discussion of the pain characteristic of some local urologic lesions, a report of two cases with diagnostic problems is presented.

REPORT OF CASES

CASE 1.—A man aged 45 complained of a painful swelling of the left epididymis and vas deferens that had come on rapidly the day before while he was at work delivering milk. The previous day he had noted a mild backache across the sacrum and in the groin on the left side. As there was no history of venereal infection, no urinary symptoms were present and no urethral discharge had been observed, conservative treatment was carried out. In due course of time the epididymitis subsided and along with it the backache in the sacral region.

Shortly thereafter the patient began to complain of a dull nonradiating ache causing constant discomfort, though not actual pain, in the costovertebral angle on the right side. Urinalyses revealed the continued presence of a considerable amount of pus and a few erythrocytes; the prostatic secretion contained pus cells from 2 to 3 plus. A retrograde pyelogram disclosed what appeared to be a small calculus in the lower third of the ureter on the right side, and a slight nephroptosis. The diagnosis of ureteral calculus did not seem satisfactory, however, because absolutely no obstruction could be felt upon ureteral catheterization. Subsequent examination revealed that the supposed calculus shadow was not a stone in the ureter but a phlebolith. The corrected diagnosis of obstruction of the upper part of the ureter and nephroptosis was then made. The kidney in all probability had acted as the focus for the infection of the urinary tract, which had manifested itself as an acute epididymitis. The backache in the upper portion of the lumbar region had been overshadowed by the more acute infection.

CASE 2.—While sitting at the breakfast table, a 20 year old naval recruit was suddenly seized with acute excruciating pain in the lower quadrant of the right side to the right of and somewhat below the umbilicus. The pain produced syncope, and the patient was moved to his quarters where he awakened. The severity of the pain decreased during the next hour; however, he vomited three times. That afternoon when he was moved to the hospital, the principal pain was a little above McBurney's point with radiation to the back toward the right kidney. A blood count made at that time was normal, but four hours later there was an elevated white cell count of 10,400. There was no fever, and examination of the urine gave normal results.

The patient was seen in consultation that evening since the preliminary diagnosis of acute appendicitis had become complicated by the developing clinical picture. An acute renal or ureteral colic was certainly to be considered. The kidneys were not palpable. In the costovertebral angle on the right side deep pressure produced some discomfort, and bimanual pressure increased the original pain. Following carefully made intravenous urograms, which appeared to be perfectly normal, a laparotomy was done. An acute appendicitis was found with the appendix lying free in the abdomen. A considerable degree of acute mesenteric lymphadenitis was also present and was presumably responsible for the type of pain associated with renal colic.

The pain emphasized in these two clinical pictures was produced by definite urologic disease in the first instance, and in the second was not of urologic origin, but simulated it. Everyday practice brings similar problems requiring the making of a differential diagnosis.

In urologic disease pain is frequently not characteristic and consequently misleading. All too often intraabdominal pathologic change fails to present a clear cut picture with the result that diagnosis is difficult or incorrect. Discomfort is the chief complaint and often the

most obvious symptom; however, a diagnosis should never be made upon this symptom alone. Since it would be impracticable if not impossible even to mention the distribution of pain as associated with all painful urologic lesions, the problem may well be approached as it is presented to the physician by the patient.

Urogenital pain manifests itself almost invariably below the diaphragm, but there are exceptions. The somatic innervation of the kidneys is derived principally from the lower three thoracic and the first lumbar segments, but the sixth to the tenth thoracic segments also must be included. Although referred pain of renal origin may be felt in the chest, it is,

DORSOLUMBAR PAIN

Almost any internal organ may produce backache by referred pain. In the upper lumbar or dorsolumbar region pain as a symptom taken alone, is significant, but most unreliable. The spine, the spinal cord and the costal nerves, also the diaphragm as in cases of hernia and diaphragmatic pleurisy, together with hepatic, cholecystic, gastric, duodenal, pancreatic, splenic, aortic and adrenal disease and other lesions of the upper portion of the abdomen, may all cause backache as well as renal and perirenal disease. Manipulation of the specific organ will produce local tenderness as well as increase the referred pain. A point in the differential diagnosis of renal and perirenal lesions is that the latter usually produce local pain and tenderness only, whereas renal lesions produce referred pain. Parenchymal renal lesions are painless if the capsule and pelvis are uninvolved, but the renal capsule and pelvis are apt to produce reflected or referred pain.

The perirenal tissues are supplied with somatic sensory nerves and respond to stimulation by local discomfort. On the other hand, the sympathetic system supplies the capsule and pelvis of the kidney, and the sensation of pain derived by way of the autonomic system is the result of sudden change in pressure or tension. The sudden excruciating pain of renal colic, although as a rule typically localized in the region of the kidney, may occur in the epigastrium or around the umbilicus in the lower quadrant; also, rarely, it may be directed toward the shoulder. Radiation to the thigh and testicle of the same side is not infrequent.

The testicular pain is explained by the fact that the intermesenteric and renal plexuses supply sympathetic nerve fibers to the testes. Of rare occurrence, but not to be overlooked completely, is the phenomenon of referred pain from a diseased kidney to the opposite normal kidney, the renorenal reflex.

In contrast to the severe, knifelike or grinding, rhythmic or constant pain of renal colic, is the dull, aching, poorly circumscribed backache of renal origin. The etiologic factors causing such an ache are those which produce a gradual increase in intracapsular or intrapelvic pressure. The pain of these lesions is not characteristic; on the contrary, it is a stumbling block in diagnosis. Occupation, flatfoot, faulty posture, pelvic disease, visceroptosis and a multitude of other explanations are either the self-made diagnosis or the hurried observer's explanation. It is to be emphasized that no diagnosis of urologic disease can be made on this symptom alone.

Since the innervation of most intraabdominal organs is derived from or closely associated with the same nerves and plexuses which supply the urinary apparatus, lesions of any one will closely simulate those of another. Differentiation requires the discovery of other objective and subjective signs. The ache associated with a large calculus in the renal pelvis, a slowly progressing hydronephrosis, renal cysts, neoplasm, tuberculosis, chronic pyelonephritis and anomalies at times requires differentiation from that of chronic gallbladder disease, chronic peptic ulcer, visceroptosis, chronic colitis and many other intraabdominal abnormalities. It should be mentioned here also that not only abdominal organs but pelvic, as well, may produce backache, for instance, the dorsolumbar backache of prostatovesiculitis, distended bladder, and ovarian pathologic conditions.

LUMBOSACRAL PAIN

Pain referred to the lower lumbar and sacral regions offers less difficulty in diagnosis than that of the upper lumbar region. From the lower portion of the ureter, which is innervated by means of the inferior mesenteric, spermatic (ovarian) and hypogastric plexuses, pain is either reflected to local regions or is referred to the lower lumbar segments. Thus, the pain of appendicitis and pain in the lower part of the ureter are all too frequently con-

fused. Ureteral stricture, localized ureteritis and a kink or a calculus in the ureter are usually not cured by an appendectomy. On the other hand, it is a serious matter to allow an appendix to rupture because one or another of these conditions is thought to exist. The ureter, like the pelvis and capsule of the kidney, responds with pain to pressure or swelling.

Inflammation of the prostate and seminal vesicles gives rise to referred or reflected pain by way of a rich sympathetic plexus anastomosis (hemorrhoidal, vesical, hypogastric and renal) and through the nerve supply of the sacral cord. Lumbosacral and perineal aching pain is the usual manifestation of prostatitis or prostatism, but more distant parts often are involved as well. Backache in the upper lumbar region, pain down the inner aspect and back of the thigh, and even pain in the heel may originate in the prostatic or vesical region.

Low backache and pain in the rectum, perineum and thighs, or in fact anywhere in the lower half of the body occasionally may have its origin in the bladder. Much more frequently, however, the pain associated with disease of the bladder occurs in the region of the bladder and is almost invariably associated with urinary discomfort. The pain of overdistention is principally suprapubic, but may be accompanied by sharp shooting pain from lumbar to pubic region. Confusing the discomfort of postoperative distention with the pain of an overdistended bladder is a mistake which should not occur. Tenesmus, stranguria and dysuria, the pain symptoms of trigonal or posterior urethral disease, leave little doubt as to their origin.

Anterior abdominal pain in relation to urologic lesions, though scarcely mentioned, is nevertheless important because it is often more confusing than purely localized backache. For this reason there is little one can say to clarify the subject except that reliance must be placed on the discovery of other and more specific symptoms. For instance, acute prostatovesiculitis has been observed which closely resembled an acute abdominal catastrophe with sudden onset of nausea, vomiting, abdominal cramping, pain and generalized abdominal tenderness. Again, this same condition has been mistaken for appendicitis and intestinal obstruction. Following sudden acute retention of urine in the bladder, which in itself gave little distress, an acute renal colic has been observed, probably the result of ureteral reflux

of urine from the bladder. This condition is occasionally observed as a postoperative complication.

PAIN IN THE EXTERNAL GENITALIA

Since these organs are visible and easily palpable, the presence or absence of pain producing lesions is readily recognized. Pain referred to the glans penis and urethra originates in the lower end of the ureter, the trigon or the posterior portion of the urethra. Following an acute renal colic owing to a calculus, pain in the glans penis is a welcome sign of its progress to the lower segment of the ureter, and persistence of such pain may make necessary cystoscopic removal of the stone. For the relief of frequent painful erections, one should look to the posterior part of the urethra for the trouble as often a median bar, a prostatitis or a verumontanitis is present. Other urologic signs are occasionally completely lacking. A common origin of referred testicular or epididymal pain is in the upper portion of the ureter or the renal pelvis, as has already been mentioned.

In summary, the unreliability of pain produced by urologic diseases is stressed with the hope that more diagnostic problems may be solved.

620 Sweet Building.

THE USE OF ENDOCRINES IN THE TREATMENT OF FUNCTIONAL MENSTRUAL DISORDERS

T. H. WALLIS, M. D.
OCALA

Of all the clinical problems existing in the practice of gynecology probably no single one is more perplexing than that of the functional menstrual irregularities. The purpose of this paper is to deal only with the conditions due to such irregularities without entering into a discussion of problems that arise from other pathologic conditions.

The whole question of the treatment of menstrual disorders by the use of endocrines is at the present time one of uncertainty. On the one hand, the endocrinologists with their research and experience and the manufacturers of the hormonal substances give glowing accounts in pamphlets and even in books of the unbelievable results that should be expected

Read before the Fourth Annual Meeting of the North Central Medical District, Lake City, October 4, 1940.

from their use. On the other hand, the clinician and the general practitioner, who have the responsibility of the patient and who are very desirous of obtaining these wonderful results, are lost in a sea of highly publicized material, not knowing which one of the many and variously named preparations to use. When they finally make a choice, they find that in numerous cases gratifying results occur, but also that in many instances there is little, if any, response.

Although I am young in the practice of medicine, I have become convinced more and more each day that we, as organized physicians, should attempt to do something about the standardization of medical preparations of similar nature under one name that would represent the product in accordance with its basic principle. Certainly the situation as it exists today is to be deplored for any manufacturer, regardless of reputation or reliability, can bring high pressure methods to bear on physicians concerning a preparation, having an unpronounceable name unrelated to the drug in question, whose therapeutic value and effectiveness in producing a desired reaction are likewise remote.

The endocrine factors directly involved in menstruation are believed to originate in the anterior pituitary gland and the ovary. The thyroid gland and the adrenals are, however, so closely related to these glands of internal secretion that they cannot be omitted in any discussion of menstrual disorders. In functional menstrual disorders there is a disturbance in the regularity of the rhythm, the duration or the amount of normal menstruation. There may be one or more glands of internal secretion at fault.

In the apparently normal nonpregnant woman, the following endocrine factors must be considered when one attempts to diagnose the various types of menstrual disorders.

1. Gonadotropic Substances
 - (a) Follicle stimulating (Anterior pituitary and anterior pituitary-like hormones)
 - (b) Luteinizing
2. Ovarian Substances
 - (a) Follicular or estrogenic
 - (b) Luteal (progesterone, proluton, progestin)

In addition the thyroid secretion should be considered.¹ All patients should be subjected to thorough studies to ascertain whether there is any pathologic process, local or systemic, before endocrine therapy is administered.

We have to deal with only three general classes of hormonal substances at the present time, but one glance at the impressive though incomplete classified list which follows, makes obvious the ease with which one may become confused regarding the particular product to administer.

- I Ovarian Follicular Hormone (Estrogenic)
 1. Estradiol
 - (1) Dimenformon (Roche-Organon)
 - (2) Dimenformon Benzoate (Roche-Organon)
 - (3) Di-Ovocylin (Estradiol Dipropionate) (Ciba)
 - (4) Ovocylin (Estradiol) (Ciba)
 - (5) Progynon-B (Estradiol Benzoate) (Schering)
 - (6) Progynon-DH (Alpha Estradiol) (Schering)
 2. Estrone
 - (1) Amniotin (with other natural estrogenic substances such as occur in pregnant mare's urine)
 - (2) Estrogenic Hormone (Reed & Carnrick)
 - (3) Estrone (Abbott)
 - (4) Estrone (Lilly)
 - (5) Menformon (Roche-Organon)
 - (6) Theelol (Parke Davis)
 3. Estriol
 - (1) Emmenin (Ayerst, McKenna & Harrison) (extract of placenta, principally estriol)
 - (2) Estriol (Abbott)
 - (3) Estriol (Lilly)
 - (4) Theelol (Parke Davis)
- II Corpus Luteum Hormone
 - (1) Lipo-Lutin (Parke Davis)
 - (2) Lutocylin (Progesterone) (Ciba)
 - (3) Progestin (Lilly)
 - (4) Progestin (Upjohn)
 - (5) Progestin (Roche-Organon)
 - (6) Proluton (Corpus Luteum Hormone, progesterone) (Schering)
- III Anterior Pituitary-like Hormone (Gonadotropic)
 - (1) Antuitrin-S (Anterior Pituitary-like Sex Hormone) Apordin (Parke Davis)
 - (2) Follutcin (Chorionic Gonadotropin) (Squibb)
 - (3) Antophysin (Winthrop)
 - (4) Pregnyl (Roche-Organon)
 - (5) Gynantrin (Searle)
 - (6) Gonadogen (Upjohn) (made from pregnant mares' serum)

Functional menstrual irregularities may be divided into two types: (1) the amenorrheic type in which the patient complains of skipping periods, a tendency to longer intervals between periods, less flow or shorter periods, or all of these symptoms; and (2) the metrorrhagic type, in which the patient complains of shortening of the interval between the periods or of more prolonged or profuse periods, often with continuous bleeding. Both types are assumed to be due to hyposecretion or complete absence of one or both hormonal principles. Irregularities of the amenorrheic type are believed to be caused by hyposecretion of both the estrogenic and the luteal factors of the ovaries and those of the metrorrhagic type are believed to occur usually

owing to a hyposecretion or absence of the luteal factor.² A large number of the cases of functional menstrual disorder may be classified either as those of primary pituitary failure or those of primary ovarian failure.³

In the amenorrheic type of irregularity the uterus tends to become smaller with the endometrium changing over to the resting stage, the extent of the change depending on the number of hormonal principles present. The uterus of the metrorrhagic type usually is of normal size or even larger as a result of the presence of sufficient estrogen. Proliferation of the endometrium occurs and is often in excess of normal.

TREATMENT

The leading authorities think it is best not to employ estrogen in the treatment of the young girl in her teens. Attention should first be given to general hygiene, diet, sleep, exercise and habits. Girls of this age are very often either underweight or overweight.

When patients with amenorrheic disorders are underweight, every effort should be made to have them gain to their normal weight by proper diet and the use of such aids as cod liver oil, calcium and other drugs of choice. When the weight approaches normal, it is essential that the metabolic rate be determined. If it is low, they should be started on desiccated thyroid. A large percentage of these patients, particularly young women, will respond to this treatment. When a patient fails to respond, the addition of ovarian extract will often be sufficient. Many cases of primary amenorrhea have been completely relieved in this manner.

When this therapy fails, stimulation by gonadotropic substances (as obtained from pregnant mares' urine or serum) or estrogen is indicated for the irregularity is probably due to dysfunction of the organism. The treatment is based on the establishment of a normal cycle through stimulating the ovary to follicular development by the administration of gonadotropic substances (antuitrin-S, follutein, gyantrin or gonadogen). I have had far better results from the use of the extract of pregnant mares' serum (gonadogen) than from that obtained from the urine of pregnant women or mares. I administer with good results 10 units of this extract daily from the seventh through the twelfth day of the cycle. One should not, however, expect too

rapid results and should be content in administering it through two or three cycles. Estrogen and lutein should often be administered along with the gonadotropic substance, particularly when a period has been established, but the flow is scanty or inadequate.

After menstruation has been established, estrogen should be continued. Large doses of from 5,000 to 10,000 units should be given in the beginning, and as normal is approached, the dose is reduced. It may be given either by mouth or hypodermically once or twice weekly for a period of three months. In cases of obesity with thyroid deficiency and low metabolic rate, desiccated thyroid should be given along with the estrogen. Menstruation may ensue from this therapy. However, in the event that it cannot be decided whether the pituitary or the ovary is at fault, it is best to treat the patient for hyposecretion from both sources. Very often a dose of low voltage roentgen rays will stimulate the pituitary to activity.

FUNCTIONAL UTERINE BLEEDING

Functional uterine bleeding may occur at any time during the reproductive period. It is always very troublesome to treat. The persistent rupturing of one or more follicles and the complete absence of the corpus luteum are the findings in the ovary. There is a cystic glandular hyperplasia of the endometrium.⁴ The chief symptom is persistent bleeding, which at times becomes alarming both to the patient and the physician.

This disorder was formerly thought to be brought about by an excess of the follicular substance due to overstimulation of the ovaries by the pituitary gland. At the present time, however, it is believed to be due to the lack of secretion of the luteal factors in sufficient amount to balance the effect of the estrogenic substance. Whether this lack of the luteal substance results from pituitary or ovarian failure is not known.

Diagnosis can be made by endometrial biopsy. This procedure is, however, expensive, and difficulty is met with in getting from the laboratory the kind of diagnosis wanted. A very good idea of the endometrial growth is obtained by the use of the suction curet. Examination with the naked eye of a specimen obtained by means of this office procedure makes possible a reasonable estimate of the extent of the proliferation. Many reputable

physicians resort to this technic as a safe, reliable method.

Regardless of the factor causing the bleeding, the rational treatment seems to be the administration of corpus luteum supported by the anterior pituitary-like substance.⁹ The treatment is intended to re-establish the pituitary-ovarian balance. Corpus luteum replacement often gives gratifying results. Also, it should not be overlooked that either too much or too little thyroid secretion may be the cause of the bleeding. The administration of anterior pituitary-like luteinizing substance, especially progestin (proluton), offers excellent results. This medication is given in doses of 1 or 2 cc. daily until the bleeding is controlled.

In the past six months I have had several extreme cases of functional uterine bleeding in young women in which the use of the extracts from pregnancy urine in combination with corpus luteum failed to give the desired results; but there was excellent response to the anterior pituitary-like substance from pregnant mares' serum. This preparation seems to have a high content of not only the follicle-stimulating but also the luteinizing principles.

FUNCTIONAL DYSMENORRHEA

From 40 to 60 per cent of all women suffer from some painful disturbance of menstruation. It is acknowledged that dysmenorrhea is probably one of the most unsatisfactory conditions in gynecology to treat. This disorder is classified as (1) primary and (2) essential. In essential or acquired dysmenorrhea obvious pelvic lesions are present; in the primary type no pathologic condition is demonstrable.⁴

Primary dysmenorrhea is often thought to be due to an imbalance between the estrogenic hormone and progesterone. This is one of the most widely discussed subjects in gynecology. Most gynecologists believe that in a goodly number of cases there is no satisfactory explanation of the etiology but they regard nervous instability and low tolerance of pain as important factors.

Until additional investigation gives fuller knowledge of the endocrines, it becomes necessary to proceed on the assumption that progesterone exerts an inhibiting effect on the contractility of the uterine musculature. It has been reported that in many cases the administration of the follicular substance

seems helpful, and that in numerous cases it seems to be curative. Often in young women the most surprising results are obtained by its use. It is certainly justifiable to give this substance a trial. The usual plan of treatment is to administer progestin for from one week to ten days prior to the onset of the dysmenorrhea. The hormone of the pituitary-like substance is frequently used in combination with very good results.

MENOPAUSE

The symptoms of the menopause, other than the cessation or the irregularities of menstruation, are eminently pituitary, thyroid and ovarian in origin, coupled with instability of the nervous system. They are due to secondary changes in the cell activity of the three respective glands and appear with the decline or the suppression of the ovarian function. Of the two hormone-producing ovarian structures, the graafian follicle and the corpus luteum, the latter is the first to suffer from progressive sclerosis of the menopausal age. The thickening of the ovarian tunic offers resistance to the rupture of the graafian follicle, resulting in follicular cysts and the elimination of the corpus luteum. For this reason, abnormal uterine bleeding becomes a symptom of the oncoming climacteric.⁶ The corpus luteum hormone, the first to disappear, is an important factor in the maintenance of normal endocrine balance, and its absence partly accounts for the constitutional as well as the uterine symptoms of the menopause.

There are considered to be at least three factors that influence the climacteric: (1) the anterior pituitary gland, (2) the ovaries and (3) the uterus. In the final analysis, the ovary is involved, and about it the syndrome centers. It is difficult to say when the climacteric begins and when it ends. The loss of ovarian function is not due to the absence or insufficiency of the gonadotropic hormone necessary to stimulate the follicular apparatus of the ovary, but to a change within the ovary itself, manifested by its failure to respond to stimulation. The climacteric is basically due to this failure of responsiveness on the part of the ovary.¹

It is said that only one-third of the women entering the menopause require medical treatment. For these women, as a prophylactic measure in the premenopausal state, the administration of small doses of estrogen has

been suggested. It is given in sufficient quantities to keep the blood estrogen level as near to normal as possible. Probably oral administration in these cases has an advantage.

Women with the more extreme manifestations should be treated on a different basis, for here it is necessary to counteract the endocrine reactions causing the symptoms. The more pronounced the symptoms the greater should be the amount of estrogen given. Failure to control the menopausal symptoms is in most cases due to inadequate dosage, too short a period of treatment and, frequently, errors in diagnosis.

The use of large doses varying from 10,000 units to as high as 40,000 to 50,000 units every fourth or fifth day sometimes gives the best results. Some observers, however, do not agree on the excessive doses. It is said that it takes about a month of intensive treatment to reduce the pituitary hormone content of the urine to a normal level. This period corresponds in time with clinical evidence of improvement. The tendency of large doses of estrogen to produce excessive uterine bleeding sometimes becomes a problem. To such patients it is best to administer smaller doses. If the lesser amount does not seem to suffice, the use of roentgen therapy is indicated.

If the large doses of 10,000 or more units are used and the most serious symptoms are relieved, the doses should be decreased and the intervals between them increased. For this purpose oral administration is probably the method of choice because of its convenience and economy. As the symptoms improve the vaginal smear will show a transformation from the menopausal type with round cell infiltration to that of the leukopenic type with large flat cells with small nuclei.

CONCLUSIONS

While tremendous progress has been made in the use of the endocrines in the past few years and many patients, who were formerly subjected to a life of unpleasantness and suffering, have been relieved, there is still a great amount of work to be done.

Too many exaggerated claims of the perfection of these hormonal preparations have been brought before the medical profession, making physicians overeager to use them indiscriminately.

While almost unbelievable results have been met with on the one hand, complete failure

has been encountered on the other. Since there is involvement of several glands whose intricate secretory powers are interdependent discouragement in dealing with the problem of endocrine therapy is not warranted.

Continued treatment must be administered in order to get constructive results.

BIBLIOGRAPHY

1. Robinson, H. R.: Evaluation of Endocrine Therapy in Menstrual Disorders, *Texas State J. Med.* **35**:357-365 (Sept.) 1939.
2. Drips, D. G.: Treatment of Functional Menstrual Irregularities, *M. Clin. North America* **21**:909-928 (May) 1937.
3. Rowlett, W. M.: Functional Disturbances of Genital System, *South. Med. & Surg.* **101**:427-430 (Sept.) 1939.
4. Di Benedetto, C.: Present Status of Treatment of Dysmenorrhea, with Clinical Observations on use of New Therapy in Primary Dysmenorrhea, *M. Rec.* **142**:241-243 (Sept. 4) 1935.
5. Mazer, C., and Israel, S. L.: Symptoms and Treatment of Menopause, *M. Clin. North America* **19**:205-226 (July) 1935.

104 S. Magnolia St.



THE WAYS OF LAW AND MEDICINE

SMITH BRITTINGHAM

NORFOLK, VA.

It has been my privilege for a number of years, almost more than I should care to admit, to have contact with two great sciences, law and medicine. In the law I have been to a microscopic extent an actor, by which statement I, of course, mean the law has been my field of endeavor.

I do not count myself as ancient or even old, but nevertheless I was born into a world in which the English common law flourished somewhat like a green bay tree. As you know, that law, called "common" simply because it was based on the customs of the people, was born and matured in the mother country, and was brought to America by our forefathers simply because to bring it was the natural thing for them to do. It would have been odd indeed for them to have brought over their religion, their traditions and their ways of life and to have discarded their system of law. They knew no other system.

This common law continued very largely unchanged so that, in the main, when began my legal studies, the class room, the courts and the legal cloisters reeked with the odor (I cannot say the fragrance) of the established law of

Read before the annual meeting of the Florida Railway Surgeons' Association, Jacksonville, Apr. 28, 1941.

England. I learned to think in terms of that law and also, I trust, in terms of its philosophy. For, as you must know, law is but a reflection of a philosophy of life and conduct, just as your preparations for a surgical operation or the technic thereof are reflections of principles of asepsis, anatomy, physiology and pathology.

Looking back on my years of contact with the law, I somehow have gained the idea that I should have been happier as a physician than I have been as a lawyer; and I dare say there are many physicians who are convinced they would have made better lawyers than practitioners of the healing art. All of these reflections indicate the Fates see to it that on occasion square blocks shall fall into round holes, and as a result both clients and patients frequently turn out to be sadder but wiser men.

In any case my contact with things medical, as they have touched my specialty, the law of injuries, has created in me a lively enthusiasm and, I may also say, a profound reverence for medical science. When I contemplate, even in my feeble fashion, the vast progress that has been made in both medicine and surgery in my short lifetime, I experience a reaction of awe as well as inspiration. If there were a visible temple of medicine, and we may be sure there is an invisible one, I should be impelled to go there for worship; and in the doing I would, as did Moses on one occasion, "put off the shoes from my feet," seeing that the place on which I stood was holy ground.

This expression is, on my part, no mere manner of speaking. It is no empty adulation. I do not cast my thoughts at your feet as an offering, nor pour them out on your altar as a libation. I express myself in deepest admiration and also thanksgiving for the universal mind of medicine; for that mind is but a reflection of the Supreme Intelligence itself.

As a result of the fact that my workaday life has touched constantly both law and medicine, it is manifest that I have had an opportunity to contrast the two fields. I have often asked myself these questions: What is the inevitable and fundamental difference between the two? What is the difference in the nature of cerebration involved in them? I think I may safely say in reply that the essential difference lies in the fact that law is founded on human invention while medicine in its ultimate nature results from discovery.

Now, there is a vast difference, an unbridgeable chasm, which lies between invention and discovery. An invention is a contrivance, a fabrication, a concoction. There obviously is nothing of an immutable nature in an invention, especially in a legal invention. A discovery is discernment of something that has already existed, but which has not previously been known. Jazz and swing music were invented, not discovered. The circulation of the blood was discovered, not invented. It takes more brain power to discover than to invent; and that fact is nowhere better illustrated than in a comparison of law with medicine.

I do not mean to imply that in the practice of medicine the processes of invention are not known. They are; but invention in the field is simply an ancillary thing, a mere part of the procedure. Such invention is the shadow rather than the substance; which fact is in utter contrast to the law. For example, when medicine discovered the damage that bad tonsils may do and it became necessary to perform tonsillectomies, some clever fellow invented the surgical snare with which to do the work. Dr. Marion Sims had a job to do which required a special instrument; so he bent an old spoon, and as a result the duck-billed speculum was invented. Physicians knew what they wanted to look for in suspected diseases of the bladder. They had already discovered the pathology that might be involved, but a clever mind put into their hands the cystoscope; and now seeing is believing. If you find a patient with an unmistakable syndrome which makes it advisable to put him through the delightful experience of touching up the verumontanum, you are provided with an endoscope, which I have found is most admirable for the purpose. Sometimes old instruments are rendered obsolete because of your new discoveries, which are veritable trail blazers. Was this truth not illustrated when in blood transfusions it was found that a little sodium citrate practically outlawed or outmoded the difficult use of complicated apparatus?

Yes, your profession has given to the world some novel and ingenious inventions, but, as I have already indicated, they were, as a rule, prompted by discoveries which were of a far more arresting nature. It is in those discoveries that rests the glory of medicine. In its revelatory processes there is detectable the Divine Spark, a sort of reaching out and coordinating of the eternal laws of natural phenomena. Clearly this

is what is involved in Lord Tennyson's sweeping verse:

Flower in the crannied wall,
I pluck you out of the crannies,
I hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and Man is.

That is a sweeping, brave statement, but you as scientists know that it is very close to, if not quite, the raw truth; for science now teaches that each cell contains a universe. To know a single cell in all of its phases, histologically, physiologically, pathologically, would bring us very near to knowing 'what God and Man is.' Medical science proceeds that way; and for this reason, I say it is touched off by the Divine Spark.

It would indeed be carrying coals to Newcastle if I were to dilate on the discoveries of the great men of medicine in our modern time. You all know the facts better than do I. Lister created a new surgery, but Pasteur turned completely topsy-turvy and revolutionized the entire field of medicine, and all so recently. Why, Pasteur was still alive when I was well on my way to high school. His work is so common place with you that you do not even think of his remarkable and complete demonstration of the principle of bacterial infection. Still you are guided by him every moment of your professional activity. Your practice is redolent with the fragrance of Pasteur's laboratory.

The public at large, and I am one of it, is a fickle creature, forgetful, ungracious, unappreciative, thankless. Most of the world capitalizes and emphasizes the unimportant things of life, the vainglorious and the paltry things, and remains unmindful of the weightier matters of human progress. Out of the wars which have torn humanity's heart over and over again, have come monuments in ten thousand cities, erected to generals and so-called statesmen. And those bronze and marble images are unveiled,—for what? Why, to glorify war. But where do you find a monument to diphtheria antitoxin, which has saved millions of child lives in our day? Where is there a monument to the Wassermann reaction, the tremendous value of which is absolutely beyond calculation? Where are the monuments to the vaccine against rabies? Where are the monuments to those who made anesthesia possible? The great minds that produced these wonders, and they are truly great, are remembered by the few,

but the glorifications and cheers of the multitudes are still directed toward the heroes of war, the puny statesmen of legislative halls and legalists who never in their lives vented an original thought. Here and there the great discoverers in your profession have been remembered, but in the puniest degree as compared to generals, admirals, war-makers, jurists and statesmen. Our hero worship is directed toward the destructionists, not the constructionists.

Let me illustrate for you just how the legal mind approaches a problem. I shall use a situation which touches your profession. Take the case in which an employee is injured due to his employer's fault. The employer engages a physician to attend the injured person, and the physician, being an incompetent one, gets a bad result. The law holds that there is no responsibility on the employer for the physician's malpractice if there was no affirmative negligence in employing the incompetent physician. But, if in such case the patient were himself to employ the same physician and the same result were to follow, the employer would be held responsible not only for the original hurt but also for the aggravation thereof caused by the physician's errors. Do you ask me to explain that foolish conflict of "principle?" My answer is that there is no sensible explanation. I have not even been able to discover a foolish one.

Bearing always in mind the cerebrotional methods which characterized the work of such men as Louis Pasteur, Ronald Ross, Battista Grassi, Hideyo Noguchi and many other trail blazers in your field, let us consider, in contrast, another specimen of the legal mind.

Until very recent years the English and American law of responsibility for injuries done by one person to another was founded on the principle of cause and effect. That principle is completely wrapped up in the familiar Biblical proclamation that "whatsoever a man soweth, that shall he also reap." All through Moses' statutes we find this basic principle variously elaborated, but the nucleus is what we are interested in; and I think you will agree that the Biblical rule as to sowing and reaping is severely scientific. It would indeed be a pathetic eventuation here in Florida if, after planting strawberries, you were to get a lusty crop of skunk cabbage. Chaos must obviously result when reaping and sowing do not correspond.

Taking this fact over into the legal field, English and American law for centuries demanded that when one person, through negligence, caused hurt to another, the wrongdoer must make the injured one whole. Likewise, if an employee brought about his own hurt, the master could not be held responsible therefor. Under this scheme of things, if you are called in to attend a sick person, and notwithstanding the fact that you use all the most approved methods of your science, the patient succumbs, let us say from a heart block, you should in no way be held responsible for the death. And that is, in fact, the law. If an automobilist with gross negligence runs broadside into your car and is injured, you should not be held for his hurt and damage. You have not sown fault and you should not reap responsibility. And that is the law.

But in the railroad world all of this eternal logic is set aside as so much chaff. In the railroad world you may indeed plant strawberries and reap skunk cabbages. Under both federal and state laws railroads are, for example, held responsible for injuries suffered by their employees even when the railroad is not negligent and when the employee caused his own injury by his own fault. Do you ask me why? My reply is that this anomaly is simply due to the manner in which the legal mind works.

One presently proposed law seeks to make the railroads responsible for the disabilities of their employees regardless of the railroad's negligence and it defines disability in these words:

The term "disability" means death or impairment, whether partial or total, of an individual's earning capacity for regular employment for hire, whether such impairment is physical, mental, psychological, nervous, or otherwise in nature, or in the nature of injury, illness, sickness, disease, or otherwise.

The proposed law further provides:

Any disability incurred either at the place of employment or during the hours of employment, including overtime, shall be deemed to arise in the course of employment; and any disability which is otherwise reasonably related to the fact of employment shall be deemed to arise in the course of employment irrespective of whether it is incurred outside the place of employment, the hours of employment, or both, and irrespective of any employee's assumption of risk, or any employers' employee's fellow servants, or any other person's fault, negligence, contributory negligence, gross negligence, recklessness, or other misconduct, wilful or negligent.

You may thus understand why I say that in the railroad world the scientific and Biblical law of cause and effect is absolutely nullified. Yes, in a world in which the cardinal doctrine of equal rights to all and special privileges to none is supposed to be a vital principle of government and statecraft.

With one more illustration of the legal mind in contrast to the medical mind, I shall release you from this ordeal. If you wanted to know what was the matter with your watch, I assume you would not consult a horticulturist; you would go to a watchmaker. If you wanted the defective water system in your residence set aright, you would consult a plumber. If you wanted a haircut, you would not go to a blacksmith. These facts are so obvious as to be childishly simple. But the legal mind does not think that way at all. If, for example, the death of a person is the subject of a legal inquiry and the question arises as to the cause of death, the decision is reached in a very curious fashion. The only reason why we are not daily jolted off our feet by its curious and bizarre nature is that we have been living under the system so long, yes, for centuries.

One would assume, if he thought logically, that a medical question should be decided by physicians. But the law does not work that way. It says, for example, that the proper way to decide whether or not locomotor ataxia is traumatic is to leave it to the findings of a panel of nonmedical, nonscientific jurors. If we want to know the part which an aortic aneurysm has played in one's death, we get twelve laymen, a mechanic, a merchant, a clerk, a banker, a laborer, a butcher, a baker, a candlestick maker, an automobile salesman, a longshoreman, a brick mason and a farmer. We swear them in and tell them to "go to it." When they come to a conclusion, it is binding even on the court because, as you must know, our system of trial law is based on the fundamental proposition that the finding of facts is within the province of the jury, however difficult and scientific the subject at hand may be. Ah! the ways of the legal mind are like the love of God, they pass all understanding. For my part, I like the methods of the medical mind. You should feel proud of your heritage and the sort of milieu in which you live and move and have your being.

FLORIDA MEDICAL ASSOCIATION

OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., PRESIDENT.....Miami
 GILBERT S. OSINUP, M.D., PRESIDENT-ELECT.....Orlando
 LUTHER W. HOLLOWAY, M.D., 1ST VICE-PRES.....Jacksonville
 FREDERICK K. HERPEL, M.D., 2ND VICE-PRES. W. Palm Beach
 WALTER C. PAYNE, M.D., 3RD VICE-PRES.....Pensacola
 SHALER RICHARDSON, M.D., SEC'Y-TREAS.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., CHAIRMAN, "C," '44 Jacksonville
 J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
 GEORGE L. COOK, M.D., "D," '42.....Tampa
 FREDERICK K. HERPEL, M.D., "F," '43.....West Palm Beach
 WALTER C. PAYNE, M.D., "A," '44.....Pensacola
 WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
 WALTER C. JONES, M.D., (EX-OFFICIO).....Jacksonville
 SHALER RICHARDSON, M.D., (EX-OFFICIO).....Jacksonville
 STEWART G. THOMPSON, D.P.H. (ADVISORY).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., CHAIRMAN, "C," '43.....St. Augustine
 LELAND F. CARLTON, M.D., "B," '42.....Tampa
 CHARLES J. COLLINS, M.D., "E," '43.....Orlando
 ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
 HOMER L. PEARSON, M.D., "F," '44.....Miami
 JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H.D. VAN SCHAIK, M.D., CHAIRMAN, "C," '43 Jacksonville
 LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
 HORACE A. DAY, M.D., "E," '44.....Orlando
 WHITMAN C. MC CONNELL, M.D., "D," '42.....St. Petersburg
 BRUCE M. RHODES, M.D., "A," '42.....Tallahassee
 JOSEPH S. STEWART, M.D., "F," '43.....Miami

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., CHAIRMAN, "D," '42.....Tampa
 REDDIN BRITT, M.D., "C," '42.....St. Augustine
 ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
 J. N. MC LANE, M.D., "A," '44.....Pensacola
 CAYETANO PANETTIERE, M.D., "E," '44.....Miami Beach
 WALTER A. WEED, M.D., "F," '43.....Lakeland

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., CHAIRMAN, "C," '42 Daytona Beach
 WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
 SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
 BAILEY B. SORRY, JR., M.D., "F," '44.....Palm Beach
 JAMES L. STRANGE, M.D., "B," '44.....McIntosh
 HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., CHAIRMAN, "F," '42.....Miami
 HAYNSWORTH D. CLARK, M.D., "E," '42.....Pt. Pierce
 AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
 GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
 JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
 ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., CHAIRMAN, "C," '42.....Jacksonville
 HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
 W. WELLINGTON GEORGE, M.D., "F," '43 West Palm Beach
 FRANK D. GRAY, M.D., "E," '44.....Orlando
 DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
 GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., CHAIRMAN, "F," '44.....Miami
 JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
 HEWITT JOHNSTON, M.D., "E," '43.....Orlando
 J. N. MOORE, M.D., "B," '44.....Ocala
 R.W.S. OWEN, M.D., "D," '43.....St. Petersburg
 HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., CHAIRMAN, "F," '44.....Miami Beach
 EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
 ROBERT F. HENDERSON, M.D., "E," '44.....Orlando
 EDWARD JELKS, M.D., "C," '42.....Jacksonville
 JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
 COITLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., CHAIRMAN, "C," '42.....Jacksonville
 ELMO D. FRENCH, M.D., "F," '44.....Miami
 ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
 LOUIS M. ORR, II, M.D., "E," '42.....Orlando
 JOHN H. THOMAS, M.D., "B," '43.....Gainesville
 JOR I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., CHAIRMAN, "F," '44 Ft. Lauderdale
 ISAAC M. HAY, M.D., "E," '42.....Melbourne
 JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
 GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
 EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
 RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., CHAIRMAN, "F," '42.....Miami
 WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
 J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
 DUNCAN T. MC EWAN, M.D., "E," '43.....Orlando
 ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
 LUDO VON MEYSENBURG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., CHAIRMAN, "E," '44.....Orlando
 HARRY S. HOWELL, M.D., "B," '43.....Lake City
 PAUL KELLS, M.D., "F," '43.....Miami
 ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
 WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
 WILLIAM A. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., CHM., "F," '42.....W. P. Beach
 LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
 I. M. HAY, M.D., "F," '43.....Melbourne
 W. WARDLAW JONES, M.D., "B," '44.....Dade City
 ROBERT G. NELSON, M.D., "D," '42.....Tampa
 FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., CHAIRMAN, "F," '44.....Coral Gables
 THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
 EUGENE G. PEEK, M.D., "B," '42.....Ocala
 COUNCILL C. RUDOLPH, M.D., "D," '42.....St. Petersburg
 WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
 ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., CHAIRMAN, "C," '42.....Jacksonville
 JAMES L. CHALKER, M.D., "B," '42.....Ocala
 LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
 JOHN D. HAGOOD, M.D., "D," '44.....Clearwater
 LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
 ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

TWELFTH—W. DUNCAN OWENS, M.D., CHM., '43 Miami Bch.
 FIRST—WILLIAM C. ROBERTS, M.D., '42.....Panama City
 SECOND—C. D. WHITAKER, M.D., '43.....Marianna
 THIRD—J. M. PRICE, M.D., '43.....Live Oak
 FOURTH—ALVA T. COBB, M.D., '42.....Gainesville
 FIFTH—LUCIEN Y. DYRENFORTH, M.D., '43.....Jacksonville
 SIXTH—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
 SEVENTH—JOHN R. BOLING, M.D., '43.....Tampa
 EIGHTH—HOWARD V. WEEMS, M.D., '42.....Sebring
 NINTH—CARL D. HOFFMANN, M.D., '42.....Orlando
 TENTH—E. B. HARDEE, M.D., '43.....Vero Beach
 ELEVENTH—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., CHAIRMAN, "A," '43.....Quincy
 THOMAS H. BATES, M.D., "B," '43.....Lake City
 R. RENFROE DUKE, M.D., "D," '44.....Tampa
 WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
 RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
 ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., CHAIRMAN.....Jacksonville
 WALTER C. JONES, M.D.....Miami
 SHALER RICHARDSON, M.D.....Jacksonville
 JAMES E. PAULLIN, M.D., (A.M.A. EX-OFFICIO).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., DELEGATE.....Jacksonville
 HERBERT L. BRYANS, M.D., ALTERNATE.....Pensacola
 (Terms expire Dec. 31, 1942)
 MEREDITH MALLORY, M.D., DELEGATE.....Orlando
 GEORGE M. DAWSON, M.D., ALTERNATE.....West Palm Beach
 (Terms expire Dec. 31, 1943)

Committees—Continued on next page

COMMITTEES—Continued

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., CHAIRMAN, 1919.....	Jacksonville
W. HENRY SPIERS, M.D., SECRETARY, 1938.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902.....	Pensacola
HENRY E. PALMER, M.D., 1909.....	Tallahassee
ROBERT H. MC GINNIS, M.D., 1915.....	Jacksonville
FREDERICK J. WALTER, M.D., 1918.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923.....	Jacksonville
JOHN C. VINSON, M.D., 1924.....	Tampa
JOHN S. NICEWAN, M.D., 1925.....	Orlando
H. MASON SMITH, M.D., 1926.....	Tampa
JOHN A. SIMMONS, M.D., 1927.....	Arcadia
FREDERICK J. WAAS, M.D., 1928.....	Jacksonville
HENRY C. DOZIER, M.D., 1929.....	Ocala
JULIUS C. DAVIS, M.D., 1930.....	Quincy
GERRY R. HOLDEN, M.D., 1932.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....	Tampa
HOMER L. PEARSON, M.D., 1934.....	Miami
HERBERT L. BRYANS, M.D., 1935.....	Pensacola
ORION O. FEASTER, M.D., 1936.....	St. Petersburg
EDWARD JELKS, M.D., 1937.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....	Ft. Lauderdale
J. SAN TURBERVILLE, M.D., 1940.....	Century

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association, Box 1018

Jacksonville, Fla.

Telephone 5-0577

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.....	Orlando
FRANK C. METZGER, M.D.....	Tampa
HOMER L. PEARSON, M.D.....	Miami
J. H. POUND, M.D.....	Tallahassee
W. MC L. SHAW, M.D.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., CHAIRMAN.....	Miami
SHALER RICHARDSON, M.D.....	Jacksonville
HERMAN WATSON, M.D.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., CHAIRMAN.....	Jacksonville
THEODORE F. HAHN, M.D.....	Deland
COUNCIL C. RUDOLPH, M.D.....	St. Petersburg

DISTRICT MEETINGS—FIRST SERIES

The first three annual medical district meetings arranged by the Council will be held on consecutive days, beginning Thursday, October 2. The first meeting will be in Tallahassee on Thursday, October 2; the second in Gainesville, Friday, October 3, and the third in St. Augustine, Saturday, October 4.

Every member is urged to attend his annual district meeting; he is not, however, limited to attendance at that one meeting as all district meetings are open to every member of the State Association. It is hoped that these meetings will

be well attended, and that the members will avail themselves of the opportunity to enjoy the good scientific programs and the entertainment offered by the Council and the host societies. Special entertainment has been arranged for the wives of the doctors, and an official meeting of the Woman's Auxiliary will be held at each district medical meeting.

District meetings bring to our membership a splendid opportunity to get better acquainted with out-of-town members and to make new acquaintances which may result in close friendships. The officers of your Association and the chairman of the Council, at considerable sacrifice, attend all of the district meetings.

There are many problems facing the practitioner today and these meetings, which are more informal than a larger one, allow more time for discussion. If there is any problem you wish discussed, bring it up at the business session of your district meeting, or discuss it with one of the officers or some of your other colleagues. The exchange of ideas is helpful not only to the individual member himself but to the State Association and to the profession.

The second series of district meetings will be held October 30 and 31 and November 1 at Hollywood, Bartow and Orlando, respectively.

RETURN YOUR INFORMATION CARD FOR THE DIRECTORY PROMPTLY

About September 1, an information card was sent from the headquarters office of the American Medical Association to every physician in the United States and Canada. The information secured is to be used in compiling the Seventeenth Edition of the *American Medical Directory*.

The directory is prepared at regular intervals in the Biographical Department of the American Medical Association. The last previous edition appeared in 1940. This volume is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States; it has been especially valuable in the medical preparedness program. In it, as in no other published directory, are dependable data concerning physicians, hospitals, medical organizations and activities. The directory provides full information concerning medical colleges, specialization in the

field of medical practice, memberships in special medical societies, tabulations of medical journals and medical libraries and, indeed, practically every important fact concerning the medical profession in which any one might possibly be interested.

Before filling out the information card, read the instructions carefully. Physicians are especially urged to state whether or not they are on extended active duty for the medical reserve corps of the United States Army and Navy. Fill out the card and return it promptly whether or not a change has occurred in any points on which information is requested. If a change of address occurs before March 1, 1942, report it at once. Should you fail to receive a card before the first of October, write at once to the headquarters office stating that fact and a duplicate card will be mailed.

PLAGUE CONTROL CONFERENCE

Evidence that plague infection among wild rodents of western United States is spreading eastward prompted Surgeon General Thomas Parran of the United States Public Health Service to call a plague control conference August 28-29 at Salt Lake City, Utah.

Those invited to attend the conference were health officers from California, Oregon, Washington, Nevada, Montana, Idaho, Wyoming, Utah, Colorado, Arizona, New Mexico and North Dakota. Infection among wild rodents has progressed steadily during the past five years from Pacific Coast eastward as far as the Dakotas. The purpose of the conference was to stimulate rat control programs in urban and rural areas.

In the past, outbreaks of human plague have almost invariably been preceded by marked increase in the disease among animals which harbor the infection. Plague is passed from rodents to humans by infected fleas. According to Surgeon General Parran, unless prompt and effective control measures are undertaken plague infection among rodents may spread to the more populous areas of the Middle West and East creating a serious hazard to humans.

Surveys conducted by the Public Health Service in 1935 revealed plague infection among wild rodents in Montana, California and Oregon. In each succeeding year, including 1941, infection has been demonstrated in ground squirrels, chipmunks, rats, marmots, and other wild rodents in Arizona, California, Idaho, Montana, Nevada,

New Mexico, Utah, Washington and Wyoming.

Infection among rodents has been discovered recently as far east as North Dakota.

The first outbreak of human plague in this country occurred in 1900 in San Francisco. Plague in California reached epidemic proportions in 1907-08. Since 1900 there have been 502 cases and 315 deaths in this country. Two human cases of plague, both in California, have been reported this year.

RESPIRATORS

The National Foundation for Infantile Paralysis, 1920 Broadway, New York, has published a valuable booklet entitled "Respirators; Locations and Owners." This list of adult type respirators or "Iron Lungs" has been compiled from records available July 1, 1941, and contains only those machines which have been approved by the Council on Physical Therapy of the American Medical Association. For Florida, the following respirators are listed:

Bushnell (<i>Sumter</i>)	Mr. J. H. Popham
Clearwater (<i>Pinellas</i>)	Mr. L. G. Cromartie
Gainesville (<i>Alachua</i>)	Alachua County Hospital (Owned by B.P.O.E.)
Jacksonville (<i>Duval</i>)	St. Luke's Hospital
Lakeland (<i>Polk</i>)	Morrell Memorial Hospital
Leesburg (<i>Lake</i>)	Theresa Holland Hospital
Miami (<i>Dade</i>)	James M. Jackson Memorial Hospital (2; 1 owned by American Legion)
Orlando (<i>Orange</i>)	Orange General Hospital
Pensacola (<i>Escambia</i>)	Pensacola Hospital (Owned by Escambia County Medical Society)
St. Petersburg (<i>Pinellas</i>)	Mound Park Hospital
Tampa (<i>Hillsborough</i>)	Tampa Municipal Hospital (2)
W. Palm Beach (<i>Palm Bch.</i>)	Good Samaritan Hospital
Winter Haven (<i>Polk</i>)	Evans Motor Company

MEDICAL LICENSES GRANTED

Dr. W. M. Rowlett, Secretary of the State Board of Medical Examiners, announces that 88 applicants were successful in passing the examination held by the Board in Jacksonville on June 23 and 24. The names of the successful applicants are as follows:

Ande, Willard F., 230 Princeton Drive, Lake Worth (Columbia)
 Anderson, William H., Winter Haven (Rush)
 Benbow, John T., Fla. State Hospital, Chattahoochee (Iowa)
 Bernstein, Joseph C., Route 1, Box 284, Lake Worth (Maryland)
 Bohrod, Milton G., 8239 Abbott Ave., Miami Beach (Illinois)
 Booth, Thomas E., Crestview (Louisville)
 Bryant, Donald S., Box 752, Lakeland (Loyola)
 Caswell, H. Taylor, Temple University Hospital, Philadelphia (Temple)

Cayer, David, 403 Woodbine St., Jacksonville (Duke)
Christian, Thomas B., St. Mary's, Georgia (Vanderbilt)
Coll y Cabrera, Jose D., 909 Grace St., Richmond, Va. (Virginia)
Coward, Charles T., Grady Hospital, Atlanta (Emory)
Crawford, Hugh, Grady Hospital, Atlanta (Emory)
David, J. K., Jr., 1605 Avondale Ave., Jacksonville (Duke)
Deane, Harry R., 6103 Sixth Ave. N., St. Petersburg (Loyola)
Dix, John W., 1725 Primera, Coral Gables (Washington)
Douglas, Robert H., Weirsdale (Emory)
Duncan, J. Harry, Grady Hospital, Atlanta (Emory)
Edwards, George W., II, 309 Cherokee Drive, Orlando (Temple)
Eller, William D., Bellevue Hospital, 4th Division, New York (Arkansas)
Fanburg, Sol J., 31 Lincoln Park, Newark, N. J. (Pennsylvania)
Farley, Frank J., Tampa Municipal Hospital, Tampa (Rush)
Foraker, Alvan G., U. S. Marine Hospital, Key West (Pittsburgh)
Frank, Dee Edward, 158 W. 81st Street, New York (Pennsylvania)
Gamse, Edmond, Dade County Hospital, Miami (New York)
Garlick, William L., Mercy Hospital, Baltimore (Geo. Washington)
Ginsberg, Harold S., 930 N. Grandview Ave., Daytona Beach (Tulane)
Gordon, T. Gilbert, Municipal Hospital, Tampa (Tennessee)
Greene, Ralph N., Jr., 622 Velarde Ave., Coral Gables (Vanderbilt)
Gross, Herbert F., 2526 Forbes, Jacksonville (Bellevue)
Hanley, John James, U. of Florida Infirmary, Gainesville (New York)
Hewitt, Linus W., Citizens Bank Bldg., Tampa (Nebraska)
Hoffman, E. F., 1111 Nicholson Road, Jacksonville (Rush)
Hood, R. C., Fla. State Board of Health, Jacksonville (Johns Hopkins)
Hyman, Jack, 6110 Interbay Blvd., Tampa (Tulane)
Ikeler, Earl R., 860 - 13th Ave. S., St. Petersburg (Hahnemann)
Isbell, Euclid A., Grady Hospital, Atlanta (Tulane)
Jones, Arthur D., 458 Tenth Ave., N., St. Petersburg (Tennessee)
Kimmel, Merl F., 209 Logan Blvd., Altoona, Pa. (Temple)
Kopp, Benjamin, 7612 Bay Parkway, Brooklyn (Arkansas)
Krakower, Irving, Station Hospital, Camp Blanding (Illinois)
Krugman, Philip I., 570 Park Ave., S. E., Atlanta (Emory)
Lancaster, Avaline, Kissimmee (Virginia)
Lester, J. L. G., Jr., Key West (Tulane)
Letton, Alva Hamblin, Georgia Baptist Hosp., Atlanta (Emory)
Levy, Morton, 521 Revere Street, Orlando (Tulane)
Love, Edward D., Quincy (Emory)
McCorkle, Robert L., Route 6, Box 255, Atlanta (Emory)
MacDougall, Orrin P., 141 E. Grand Blvd., Detroit (Wayne)
McEachern, Myron L., 715 S. Edison Ave., Tampa (Emory)
Maddock, Walter G., 1314 Sheehan Ave., Ann Arbor, Mich. (Michigan)
Maloney, Milton C., Temple University Hospital, Philadelphia (Temple)
Marks, Bert W., 1619 Jefferson Ave., Miami Beach (Louisville)
Mathers, D. H., White Springs (Maryland)
Messer, Addison Lee, Route 4, Tallahassee (Duke)

Mouradian, A. H., Victoria Hospital, Miami (Columbia)
Nave, Dick D., St. Luke's Hospital, Jacksonville (Memphis)
Pate, Julien C., Jr., 4201 Bayshore Blvd., Tampa (Emory)
Patterson, Robert J., Duval County Hospital, Jacksonville (Cincinnati)
Patterson, W. A., Jr., 1240 N. W. 3rd Ave., Miami (Meharry)
Peterson, W. R., 429 Campbell St., Daytona Beach (Meharry)
Pomerance, Max, 94-12 109th Ave., Ozone Park, N. Y. (Long Island)
Poppe, Frederick P., 4100 Colfax Ave. S., Minneapolis (Minnesota)
Rao, John O., 620 Elizabeth Street, Key West (New York)
Rawdon, Robert M., Box 803, Daytona Beach (Tulane)
Reavis, W. F., St. Luke's Hospital, Jacksonville (Georgia)
Richardson, Robert P., 720 Sweet Building, Ft. Lauderdale (Minnesota)
Rosenthal, Julius M., 5355 La Gorce Drive, Miami Beach (Bellevue)
Sadler, Glendy G., Mount Dora (Emory)
Scott, David H., 324 W. Hickory St., Arcadia (Harvard)
Sealey R. Mitchell, 722 S. Monroe St., Tallahassee (Emory)
Sheftall, Amelia B., 237 College Court, Gainesville (Georgia)
Shepperd, Lewis A., Box 2812 Miami (S. Carolina)
Sigman, Murray D., 36 Rhode Ave., St. Augustine (Temple)
Simonson, Melvin, Miami Beach Hospital, Miami Beach (Illinois)
Smith, J. J., Duval County Hospital, Jacksonville (Washington)
Smith, Marshall E., 613 S. Newport Ave., Tampa (Johns Hopkins)
Taylor, John C., 3229 Park St., Jacksonville (Yale)
Tedford, Arthur C., 1210 Kuhl Ave., Orlando (Tulane)
Tierney, Nicholas A., 204 W. DeLido Drive, Miami Beach (Johns Hopkins)
Torrado, Rene A., St. Francis Hospital, Miami Beach (Tulane)
Walker, Howard M., 519 E. Main St., Spartanburg, S. Car. (Texas)
Watson, Henry L., 2115 Watrous Ave., Tampa (Emory)
Wickman, William, 312 E. Central Ave., Valdosta, Ga. (Syracuse)
Williams, R. Reche, Jr., 1403 Marion St., Tampa (Meharry)
Winslow, Philip M., Strong Memorial Hosp., Rochester, N. Y. (Rochester)
Witten, Victor H., 1018 Holly Lane, Jacksonville (Tulane)
Woodville, John B., Jr., 6338 Seventh Ave. N., St. Petersburg (Virginia)

BIRTHS AND MARRIAGES

BIRTHS

Dr. and Mrs. Lauren McCall Sompayrac of Jacksonville announce the birth of a son, Lauren McCall, Jr., on September 5.



MARRIAGES

Dr. William M. Howdon of Miami and Miss Arline Kaye of Miami Beach were married July 19.



Dr. T. H. Phipps, Jr., and Miss Dorothea Rights of Tampa were married August 9.

STATE NEWS ITEMS

The Eighth Annual Clinical Congress of the Florida Section, Southeastern Surgical Congress, was held at Orlando on Thursday, August 7; Dr. Frederick Waas, chairman of the Committee, presided. There was an excellent attendance.

Papers were read by the following physicians:

Robert L. Rhodes, Augusta.

James L. Borland, Jacksonville.

Allen H. Bunce, Atlanta, President, Medical Association of Georgia.

Thomas P. Goodwyn, Atlanta.

J. K. Quattlebaum, Savannah.

Wm. Perrin Nicholson, Jr., Atlanta.

Robert C. Major, Atlanta.

Robert B. McIver, Jacksonville.

A delicious luncheon was served at the noon intermission by the courtesy of the Orange General Hospital. At four o'clock the meeting adjourned to the Annual Barbecue of the Orange County Medical Society.

The Physicians Casualty Association of America has made a reduction in the \$25.00 per week accident and health insurance, of \$1.00 per year; in the \$50.00 per week accident and health insurance, of \$2.00 per year and in the \$75.00 per week accident and health insurance, of \$3.00 per year.

The Florida Board of Examiners in the Basic Sciences will hold its next examinations Saturday, November 1, 1941, at John B. Stetson University, Deland. All requests for application blanks should be sent to Dr. John F. Conn, Secretary, John B. Stetson University, Deland. The Florida law requires that applications be made at least 15 days prior to the date of the examination. October 17 is the deadline for mailing applications.

Effective January 1, 1942, members of the Florida Medical Association will not be required to pay state dues while in military service. Members now in service are urged to pay their 1941 dues so they may be carried in 1942 without the payment of dues.

Dr. Joseph Halton of Sarasota is spending the months of August and September in Boston doing postgraduate work at the Harvard Medical School and with Dr. Paul White at the Massachusetts General Hospital.

Dr. W. M. Rowlett of Tampa left about the middle of August for a month's vacation in New Hampshire.

Dr. Arthur J. Logie, formerly of Jacksonville, has opened offices at 605 Lincoln Road, Miami Beach for the practice of internal medicine with special attention to diseases of the chest.

Members of the State Association who wish to read papers at the annual convention to be held in Palm Beach, April 13, 14 and 15, 1942, are urged to file their applications at once with Dr. Herbert E. White, chairman of the Association's Committee on Scientific Work. Dr. White has announced that no general letter calling for applications will be mailed to the entire membership of the Association as was done last year. All applications should be addressed to Dr. Herbert E. White, Box 1018, Jacksonville.

Dr. Edgar Austin of Plant City was principal speaker at the local Lions Club luncheon, July 15. His topic was "The Educational Value of Physical Education Today."

Dr. S. G. Hollingsworth of Bradenton was reappointed a member of the State Board of Medical Examiners. Dr. Howard G. Holland of Leesburg was appointed on the Board to succeed Dr. B. A. Chapman of Jacksonville. Governor Holland made these two appointments the early part of August.

Dr. William D. Lithgow of Miami visited clinics in Philadelphia during the month of August and will vacation at Asheville, N. C., before returning home.

Dr. J. B. Parramore of Key West took special work in women's and children's diseases at the Spartanburg Children's Hospital in Saluda, N. C. during the month of August.

Dr. J. R. West of Bunnell announces the removal of his offices to 114 S. Palmetto Avenue, Daytona Beach.

Dr. Chas. J. Collins of Orlando announces the association of Dr. Warren A. Brooks in the practice of obstetrics and gynecology, and the removal of their offices to 1503 Kuhl Avenue.

Dr. Lawrence Adler announces that he has taken over the practice of Dr. Milton Saslaw at 1238 S. W. 8th St., Miami.

The next annual meeting of the Florida East Coast Medical Association will be held in Daytona Beach from Friday noon, December 5 to Saturday noon, December 6, 1941. Members of the State Association living in the east coast district are considered members. There will be a small registration fee to cover the expense of Friday evening's banquet. Ladies are cordially invited to attend; special entertainment will be provided for them. For additional information, communicate with Dr. Ralston Wells, secretary, Daytona Beach.

Dr. Whitman Carlisle McConnell of St. Petersburg announces that his son, Whitman Hurst McConnell, has joined him for the practice of neuropsychiatry.

COMPONENT COUNTY SOCIETIES

BREVARD

The Brevard County Medical Society has paid 100% of its assessment for 1941. This society, comprised of 11 members, is headed by Dr. T. C. Kenaston of Cocoa, president; Dr. G. E. Christie of Titusville, vice president, and Dr. I. K. Hicks of Melbourne, secretary-treasurer.

PASCO-HERNANDO-CITRUS

The Pasco-Hernando-Citrus County Medical Society has joined the Honor Roll of 100% paid societies. Serving as officers of this society are: Dr. W. B. Moon, Crystal River, president; Dr. W. W. Jones, Dade City, 1st vice president; Dr. S. C. Harvard, Brooksville, 2nd vice president, and Dr. G. R. Creekmore, Brooksville, secretary and treasurer.

PINELLAS

The Pinellas County Medical Society held a meeting on the evening of August 1 at the Shrine Club. It was the last meeting of the group until in October. Considerable time was devoted during the evening to a review of the proceedings of the last meeting of the American Medical Association.

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

Regional Ileitis, WHITE, HERBERT E., St. Augustine, South. Surg. 10: 194-198 (Mar.) 1941.

Regional ileitis is a nonspecific inflammatory disease of the ileum, usually limited to its terminal portion, and not extending past the ileocecal valve. It may be acute or chronic. In acute cases the condition is usually diagnosed as acute appendicitis and its identity discovered at operation. In chronic cases the disease may produce a varied symptomatology and be diagnosed as ulcerative colitis, chronic appendicitis, tuberculosis of the intestine, diverticulitis, cancer, pelvic disorders, or adhesions.

The cause of ileitis of this regional type has not been determined. No specific bacillus has been implicated, and lymphatic disturbances or vascular extensions from appendiceal inflammation have not been proved.

The pathology as described is not applicable to any specific type of infection, the changes being those one would expect of inflammation of a glandular, muscular and serous tube: swelling, edema, cellular inflammation, scarring, contraction, and fistula formation in the later stages.

The symptoms are classified mainly under four types: (1) those which resemble acute appendicitis, (2) those which resemble ulcerative enteritis, (3) those suggesting obstruction in the small bowels, and (4) those associated with fistulas. The most constant symptoms are intermittent pain, diarrhea, and flatulence. The diagnosis is best made by gastrointestinal roentgenologic studies.

The treatment will vary with the stage of the disease. Spontaneous cures of acute cases are known, so surgical interference is not deemed wise unless the disease is in a chronic stage, with tumor formation, obstruction or fistula developing; then radical resection of the involved portion of the bowel is done, usually in one stage.

The author presents an interesting case occurring in a 31 year old man with symptoms of four months' duration. A diagnosis of acute appendicitis was made; the patient operated

but we are not given details of the postoperative therapy.



Congenital Cyst of the Epiglottis; Report of a Case, IRWIN, THOMAS M., Orlando, *Laryngoscope* 51: 288-292 (Mar.) 1941.

Congenital cysts of the larynx are exceedingly rare. Of 722 benign laryngeal tumors seen at the Mayo Clinic prior to 1938, only 35 were cysts, and only one was of embryonic origin. Jackson is reported to have observed 61 cases in his large and extensive practice. These cysts are usually classified as (1) glandular, (2) connective tissue, (3) pseudocysts.

The symptoms caused by such cysts, especially those of the epiglottis, are due to difficulty in respiration and in feeding as the cysts protrude up into the pharynx and interfere with swallowing and respiration. There may be a crowing sound during respiration, a feeble hoarse cry, a tracheal tug, choking and gasping when the infant attempts to nurse.

The treatment of such congenital laryngeal cysts is surgical, and sometimes may be of an emergency nature because, as in the author's case, even anesthesia may produce more choking.



Plastic Surgery of the Renal Pelvis, McIVER, ROBERT B., Jacksonville, *J. Urol.* 42: 1069-1083 (Dec.), 1939.

The author divides obstructions at the ureteropelvic junction into two main classifications: (1) those relieved simply by cystoscopic dilatation and (2) those requiring open surgery. Those requiring the latter method are divided successively into (a) those diagnosed early that need only simple division of bands and disposition of polar vessels; (b) later cases requiring in addition some degree of plastic repair; (c) late cases demanding resection of the extra-renal pelvis and reimplantation of the ureter; and (d) neglected cases demanding nephrectomy.

Clinical examples of cases in each of these groups and sub-groups, with the exception of (d), with the technique employed at operation are described in detail.

In 50 successive cases of operation reported by the author, nephrectomy was required in none.

The important feature in all of these ureteropelvic obstructions is the necessity for early diagnosis with subsequent repair either by cystoscopic dilatation or open operation before the damage has become so severe as to require more radical surgery with possible division of polar vessels.

The most frequent cause of obstructions at the ureteropelvic junction is aberrant vessels, a congenital condition. Complete urologic examination should, therefore, be advised in all cases of recurrent attacks of abdominal pain, even in early infancy.



Atypical Pneumonia, NEEDLES, ROBERT J., St. Petersburg, *New Internat. Clin.* Vol. 4, Ser. 3, pp. 85-89.

The author believes, despite the fact that sulfapyridine-fast strains of pneumococci have been described, that whenever apparent lobar pneumonia does not respond typically to sulfapyridine its pneumococcal origin should be questioned. In support of this belief, he describes several cases in which the symptoms, simulating those of pneumococcal lobar pneumonia at onset, did not yield to sulfapyridine and later proved to be of other origin. Among these cases were a probable virus pneumonia as described by Reiman, pulmonary tuberculosis, a staphylococcal pneumonia and a lung abscess.

EDITOR'S NOTE: The author's point of view is well taken and timely. There have been a number of cases of virus pneumonia in Florida during the past year. These cases do not respond to sulfonamide therapy.



Experiences With Hydrophil Bases and Sulfonated Products, French, Elmo D., Miami, *South. M. J.* 34: 284-287 (Mar.) 1941.

French calls attention, in turn, to the disadvantages of petrolatum or lanolin based ointments, aqueous lotions, emulsions of the oil and water type and the use of soap as a detergent and suggests that the efficiency of these agents may be improved by the incorporation or substitution of some of the newer organic substances. The latter are quite numerous and interesting and the reader is referred to the original article for a detailed description of their properties and uses.

How to Use S-M-A Powder

EACH PACKAGE OF S-M-A* CONTAINS ONE MEASURING CUP



1 Empty one tightly packed measuring cup of S-M-A powder into bottle.



2 Add enough warm previously boiled water to make one ounce.

3 Cap bottle and shake powder into solution. Feed at body temperature.



4 Easy, isn't it?



S-M-A READY TO FEED PROVIDES:

● 20 calories to the ounce, but more important, the nutritional value of S-M-A is that of a complete well-balanced food. When prepared as above, each quart provides:

10 mg. Iron and Ammonium Citrate
200 I. U. of vitamin B₁
400 I. U. of vitamin D
7500 I. U. of vitamin A

NORMAL INFANTS RELISH S-M-A—DIGEST IT EASILY AND THRIVE ON IT

*S-M-A, a trade mark of S-M-A Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addi-



tion of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

S. M. A. CORPORATION • 8100 McCORMICK BOULEVARD • CHICAGO, ILLINOIS

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

ADVERTISERS' NOTES

NEW TREATMENT OF DIARRHEA IN BABIES

Before the advent of Mead's Pectin-Agar in Dextri-Maltose, there were two methods of treating diarrhea in infants: (1) the "starvation" or "rest" method, consisting of withholding food during the duration of the diarrhea, offering the baby water and carbohydrate solutions. While this succeeded in preventing extreme dehydration, the child received practically no food to maintain nutrition, so that, when long continued, his resistance was greatly impaired. (2) the "Finkelstein method," based on the theory that some carbohydrates are especially likely to cause fermentation and prolong diarrhea. His method consisted of high protein feedings in the form of protein milk, sometimes with added carbohydrate, and continues to have many advocates, especially in breast-fed infants. One of the successful modifications has been Casec (calcium caseinate), which can be used for both breast-fed and bottle-fed infants.

In recent years, the use of raw apple and weak tea for treating diarrhea has had various proponents. The literature contains reports by Birnberg, Reglien, Kaliski, Giblin and Lischner, McCaslan, Tompkins, Borovsky, Stein, and Hunt. Smith and Fried believe that any beneficial effects from scraped raw apple are due to the partial starvation effected by the regimen. The success of apple and tea therapy has stimulated hypotheses as to the effective agent. Moro attributed its value to tannic acid. Heisler would also give credit to malic acid and to the mechanical cleansing of the intestines, while Scheer places most emphasis on indigestible bulk. Maloyth believes pectin and cellulose are the active agents.

Based on their experience with apple, Winters and Tompkins devised a mixture of pectin, agar and Dextri-Maltose which was more successful. Others have privately confirmed their finding that a mixture of this nature is of value in diarrhea. Kutscher and Blumberg studied the use of the pectin-agar mixture with and without carbohydrate. They concluded that the addition of Dextri-Maltose to the other constituents was a definite advantage. Various reasons for the effectiveness of both pectin and agar have been advanced but none has a background of experimental proof. It has been claimed that pectin is bactericidal, that its constituent galacturonic acid functions as a detoxifying agent, that it absorbs toxins and enmeshes bacteria, that its hydrophilic nature prevents dehydration, and that it is soothing to an inflamed gastrointestinal tract. Bulk is the only valuable characteristic advanced for the use of agar.

In practice, the application of this method differs from the starvation method in that full caloric feedings are immediately instituted and maintained.

The new method differs from protein milk therapy in that a diet high in carbohydrate is fed. It also has the advantage of palatability, particularly important with older children.—Mead Johnson & Company, Evansville, Ind.

PRESERVED BLOOD PLASMA

The stimulus of war has aroused great interest in substitutes for whole blood, and many intensive investigations are being undertaken in this field both from the laboratory and clinical standpoints. The indications for intravenous administration of blood plasma, such as in shock without hemorrhage, in burns, for administration of antibodies and for the maintenance of plasma protein, and even severe hemorrhage are now rather definite.

The question of sterility in stored plasma has led many investigators to advocate the addition of 'Merthiolate' (Sodium Ethyl Mercuri Thiosalicylate, Lilly) in a concentration of 1:10,000. 'Merthiolate' has been used for many years for the preservation of vaccines, sera, and other biological products, and has been logically advocated for the preservation of blood plasma. 'Merthiolate' substance for the preservation of blood serum and

plasma may be added directly, or, more conveniently, from a stock one-per cent solution which should be made up fresh every thirty days. 'Merthiolate' substance for this purpose is obtainable from the Indianapolis laboratories only.

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review as expedient.

BORN THAT WAY. By EARL R. CARLSON, M. D. The author is well known to Florida doctors as he practices part of each year at Pompano. He is a neurologist who has achieved great respect in his special work with spastic children. In this book he writes an autobiography full of interesting details concerning his own development from a helpless spastic-athetoid cripple to a position of distinction in the medical world. Woven into this story are lucid, simple explanations of the neurologic, orthopedic and psychologic problems easily understandable by the layman. Parents reading this book cannot help but become inspired to greater yet rational hopes for their own offspring similarly afflicted. Among several recent accounts this work is by far the best and should be recommended strongly by physicians to parents of spastic children. For the neuropsychiatrist, especially interesting is the effect on concentration and attention in alleviating athetosis. Likewise increased oxygenation, moderate doses of alcohol and intellectual activity seem to decrease the disability. Cloth, pp. 174. Price, \$1.75. New York: John Day Company, 1941.

INFANTILE PARALYSIS, 1941. By NATIONAL FOUNDATION FOR INFANTILE PARALYSIS. Comprising six lectures at Vanderbilt University sponsored by the National Foundation. These lectures were planned with a view to making available for physicians everywhere a resume of present knowledge of this disease. The book is distributed primarily for educational purposes and is sold at something less than cost. Contents: 1. "History of Poliomyelitis up to the Present Time," Paul F. Clark, Ph.D., Professor of Bacteriology, University of Wisconsin Medical School. 2. "The Etiology of Poliomyelitis," Charles Armstrong, M.D., Senior Surgeon, U.S.P.H.S. 3. "Immunological and Serological Phenomena in Poliomyelitis," Thomas M. Rivers, M.D., Director, Hospital of Rockefeller Institute for Medical Research. 4. "The Pathology and Pathogenesis of Poliomyelitis," Ernest W. Goodpasture, M.D., Professor of Pathology, Vanderbilt University School of Medicine. 5. "The Epidemiology of Poliomyelitis," John R. Paul, M.D., Professor of Preventive Medicine, Yale University School of Medicine. 6. "Treatment and Rehabilitation of the Poliomyelitic Patient," Frank R. Ober, M. D., John B. and Buckminster Brown Clinical Professor of Orthopedic Surgery, Harvard University Medical School. In addition, the book contains a composite bibliography of 575 references. Cloth, pp. 228. Price \$1.25. New York City: National Foundation for Infantile Paralysis, Inc.

FIRST AID IN EMERGENCIES. By Eldridge L. Eliason, A.B., M.D., Sc.D., Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia. Tenth edition. The popularity of this little book on first aid is attested by its being now in the tenth edition since its original publication in 1915. Dr. Eliason has packed in a tremendous amount of valuable information on first aid work. It is to be highly recommended to those for whom it was intended, namely firemen, police, life guards, sailors, Boy Scouts, Campfire Girls and factory workers. This otherwise fine book is, however, marred by the recommendation of tincture of iodine in fresh wounds. Fabrikoid, pp. 260 with 126 illustrations. Price, \$1.75. Philadelphia, Montreal & London: J. P. Lippincott Company, 1941.



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

Telephone 3-1302

MIAMI SURGICAL COMPANY

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

B. MARIAN BEALS
President-Treasurer

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

For the local Treatment of Acute Anterior Urethritis
(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*
Wyeth

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, PRESIDENT.....Miami
 MRS. F. W. KRUEGER, FIRST VICE-PRESIDENT.....Jacksonville
 MRS. R. L. CLINE, SECOND VICE-PRESIDENT.....Lakeland
 MRS. PAUL KELLS, CORRESPONDING SECRETARY.....Miami
 MRS. C. H. MURPHY, RECORDING SECY.-TREAS.....Bartow
 MRS. M. J. FLIPSE, HISTORIAN.....Miami
 MRS. L. C. INGRAM, PARLIAMENTARIAN.....Orlando

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, PRESS AND PUBLICITY.....Jacksonville
 MRS. P. J. MANSON, HYGEIA.....Miami
 MRS. RUPERT STOVALL, PUBLIC RELATIONS.....Ft. Lauderdale
 MRS. E. M. HENDRICKS, LEGISLATION.....Ft. Lauderdale
 MRS. GORDON H. IRA, FINANCE.....Jacksonville
 MRS. T. C. KENASTON, EXHIBITS.....Cocoa
 MRS. CLYDE ANDERSON, ARCHIVES.....St. Petersburg
 MRS. GEORGE C. TILLMAN, STUDENT LOAN.....Gainesville
 MRS. F. W. KRUEGER, PROGRAM.....Jacksonville
 MRS. R. L. CLINE, ORGANIZATION.....Lakeland
 MRS. JOHN H. OWENS, RULLETTIN.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, NORTH CENTRAL "B".....Gainesville
 MRS. E. W. VEAL, NORTHEAST "C".....Jacksonville
 MRS. J. C. GRIFFIN, SOUTHWEST "D".....Tampa
 MRS. W. C. PAGE, SOUTH CENTRAL "E".....Cocoa
 MRS. HILLARD WILLIS, SOUTHEAST "F".....Coral Gables

THE RELATIONSHIP OF A MEMBER TO HER AUXILIARY, THE PROFESSION AND THE PUBLIC

AN AUXILIARY MEMBER SHOULD KNOW:

A Medical Auxiliary serves the Medical Profession and, through it, the public. Such service is satisfactory because it is unselfish. An Auxiliary is always organized with the permission of the Medical Society and should have a Medical Advisor or Advisory Committee to direct it. The Auxiliary should make an annual report to its Medical Society and undertake no new project without its approval. The principal functions of an Auxiliary are: health education, public relations, legislation (reserve force), philanthropy and social.

The laity requires education, but it should be given through the Medical Profession, so there may be rational control of what the public thinks and does in health activities. The most important objective of an Auxiliary is to direct the public's thinking and actions into channels which will enable it to receive the authentic information on health which the Medical Profession desires to extend.

We support an organization only when we are members and understand its tasks and objectives and how to accomplish them. An Auxiliary member should, therefore, attend as many meetings as possible so that she may:

.... in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928



REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Five
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida

convention press

two eighteen west church street
jacksonville, florida



printers
publishers



"In the Mountains of Meridian"

HOYE'S SANITARIUM

Meridian, Miss.

Diagnosis and Treatment of
NERVOUS AND MENTAL DISEASES
ALCOHOLIC AND DRUG ADDICTIONS
Especially Equipped for the Treatment of
MENTAL DISORDERS

Convalescents, Elderly people and Those
Requiring METRAZOL THERAPY Given
Special Monthly Rates. Personal Super-
vision of Patients. Reasonable rates. Con-
sulting Physicians.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

*Fellow of the
American Psychiatric Association*

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

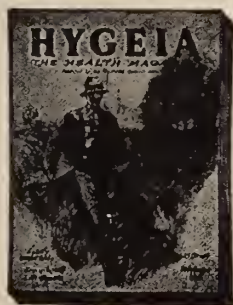
SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED



HYGEIA

The Health
Magazine
for Your
Waiting Room
Table

\$3.00 a Year

HYGEIA promotes confidence and understanding
between physician and public. It is your own
representative, giving in attractive printed form
every month the health teaching you want your
patients to have.

DIET

EXERCISE

SANITATION

CHILD CARE

RECREATION

BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn Street, Chicago

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

**Building Heated and Ventilated
Psychopathic Annex—Sound Proof
Window Guards Eliminated
Air Conditioned**



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

1. Understand the purposes and objectives of her Auxiliary.
2. Receive the particular charge given by the local, state, southern and national organizations.
3. Receive instruction on how to fulfil that charge.
4. Become informed about:
 - a. Personal and community hygiene.
 - b. Administration of local, state and national health.
 - c. Medical and health laws, local, state and national.
 - d. The health of her community.
 - e. Communicable diseases, their prevention and control.
 - f. Her health in relation to her community.
 - g. General problems of health all should know.
 - h. Approved educational material; where to obtain it.
 - i. Development of the medical arts.
 - j. Why the A.M.A. urges the promotion of Hygiene; how done.
 - k. What legislation the Medical Society sponsors; why; how the Auxiliary acts as a reserve force; what the individuals may do.
 - l. Philanthropic work related to the Medical Profession; service by her Auxiliary; what her Auxiliary is doing; why.
 - m. What lay organizations are doing in her community.

HOW DOES A MEMBER SUPPORT HER AUXILIARY? By:

1. Paying dues.
2. Attending meetings.
3. Accepting offices and chairmanships in organizations, especially those related to health, so that:
 - a. Informed speakers may address them.
 - b. Approved material may be given.
 - c. Programs and projects may be undertaken which are scientifically sound.
 - d. She may keep informed about medical matters and activities in other organizations.
 - e. She can report to her President and Society regarding programs and projects which are unwise and unacceptable; report to be made through Advisors.
4. Promoting good fellowship by affability at meetings; by attendance at entertainments and conventions; by assisting as requested.
5. Fulfilling the charges given through the Advisors.

The busy wife is an asset to the Auxiliary if she is an informed member because she has many opportunities to carry forward the aims and decisions of the Medical Profession. It is not necessary to partake of every phase of Auxiliary work to be a good member—only what one can do. A member should know when to keep quiet, when to report to Advisors, when to answer and what to say.

If for no reason but to assemble regularly and study the history of the medical arts and medical heroes, an Auxiliary would be worthwhile, because it gives wives an understanding of the supreme unselfishness and greatness of the Profession.

The time has come when the Auxiliary has so proved its worth that the question is not, "Are you an Auxiliary member?" but "Why are you not a member?"



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Convenient
Site High and Healthful

E. W. ALLEN, M.D., *Department for Men*
H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)

Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive course in Surgical Technique with practice on living tissue, starting every two weeks. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course starting October 6th. Two Weeks Course in Gastro-Enterology starting October 20th. One Month Course in Electrocardiography & Heart Disease every month, except December.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course starting September 22nd. Informal Course every week.

GYNECOLOGY—Two Weeks Intensive Course starting October 20th. Twenty Hour Personal Course in Vaginal Approach to Pelvic Surgery starting November 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course starting October 6th. Informal Course every week.

OTOLARYNGOLOGY—Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course starting September 22nd. Five Weeks Course in Refraction Methods starting October 13th. Informal Course every week.

ROENTGENOLOGY—Courses in X-Ray Interpretation, Fluoroscopy, Deep X-Ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.



CHECKERBOARD TACTICS



Like men on a checkerboard, many people jump back and forth between the squares of optimum and minimum nutrition. Both the game of nutrition and the game of checkers are a matter of some luck . . . but more skill. To maintain desired health states it is well to depend upon the skill of application of modern nutritional knowledge. Maintenance of high standard dietaries can be accomplished with surprising ease if the simple rules of nutrition are observed.



COCOMALT finds its place in this dietetic scheme of things for both normal and therapeutic diets. Its rich flavor urges young and old to drink milk. COCOMALT contains calcium, phosphorus, iron . . . Vitamins A, B₁, D and G . . . quick energizing elements . . . body building nutrients. Recent studies and references* confirm these facts.

Cocomalt is used more and more by physicians in diets for growing children and adults; for pregnancy and lactation; malnutrition, anorexia, pre- and post-operative patients, convalescence, febrile diseases and gastro-intestinal conditions.

C O C O M A L T
The Enriched Food Drink for All Ages
R. B. DAVIS COMPANY • Hoboken, N. J.

*Arch. of Ped.—56: Nov. 1939; Med. Record—Aug. 21, 1940;
Med. Record—150:1:1939; Arch. of Ped. 57:448 (July) 1940;
Med. Record—149: Jan. 1939; Surgery—6:1:1939.

INDEX TO ADVERTISEMENTS THIS ISSUE

Allen's Invalid Home	142
American Optical Co.	145
Attwood, J. K., Pharmacist	144
Brawner's Sanitarium	106
Coca-Cola Co.	112
Combs Funeral Homes (Ambulance)	144
Convention Press	140
Cook County Grad. Sch. of Medicine	142
Corn Products Sales Co.	109
Davis, R. B. Co. (Cocomalt)	143
Ferguson Funeral Home (Ambulance)	144
Hand, Carey (Ambulance)	144
Holland-Rantos, Inc.	103
Hoye's Sanitarium	141
Hygeia	141
Hynson, Westcott & Dunning	144
Kyle, S. A.	139
Lilly and Company, Eli	114
Mead Johnson & Co.	148
Miami Retreat, Inc.	141
Miami Surgical Co.	139
Natl. Assn. Chewing Gum Mfgs.	145
Palm Beach Biltmore Hotel	104
Parke, Davis & Co.	113
Petrolagar Laboratories, Inc.	102
Philip Morris & Co., Ltd., Inc.	110
Physicians Casualty Assn.	106
Randolph's Sanitarium, Dr.	139
Sharp & Dohme	111
S. M. A. Corporation	137
Southeastern Optical Co., The	106
Squibb & Sons, E. R.	105
Sun-Ray Park Health Resort	140
Surgical Supply Co.	141
Tucker Sanatorium, Inc.	146
Upjohn Co., The	108
Winthrop Chemical Co., Inc.	107
Wyeth & Bro., John	139

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome, H.W.&D.

(dibrom-oxymercuri-fluorescein-sodium)

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND

Ambulance Directory

CAREY HAND

32-36 Pine Street

ORLANDO, FLORIDA

Telephone 4181

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101

Phone 52101

MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.

FOR ANGIOSCOTOMETRY

USE THE STEREO CAMPIMETER BY AMERICAN

The study of central visual fields, including Angioscotometry, one of the most recent clinical developments, can be carried out under ideal conditions with the Lloyd Stereo Campimeter by American. The requirements of steady fixation, stereoscopically maintained; accommodative compensation, by virtue of the collimating lens, and equalized illumination of the test field, are fulfilled as in no other instrument of its type. The AO Lloyd



PATENTED

Stereo Campimeter is only one of the many outstanding ophthalmic instruments being produced by American Optical Company and Spencer Lens Company, its Scientific Instrument Division.



BY AMERICAN OPTICAL COMPANY



V-201

I

It makes their regular check-ups
“fun” by giving youngsters some
wholesome CHEWING GUM

It's such an easy, thoughtful gesture to always offer your little patients some delicious Chewing Gum while they're waiting or when they leave the office. They just love it — and it makes a big hit with adults, too. And for such a small cost this one, friendly, little act goes a long way in winning extra good will and affection. Besides, as you know, the chewing is an aid to mouth cleanliness as well as helping to lessen tension. Enjoy chewing Gum, yourself. Get a good month's worth for your office today.

**There's a reason, a time
and place for Chewing Gum**

NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS, STATEN ISLAND, NEW YORK

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison) RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association	Walter C. Jones, Miami	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest	William C. Roberts, Panama City	Stewart Thompson, Jacksonville	Tallahassee, October 2, 1941
B—North Central	Alva T. Cobb, Gainesville.....	“ “ “	Gainesville, October 3, 1941
C—Northeast	Maximilian Stern, Daytona Beach	“ “ “	St. Augustine, October 4, 1941
D—Southwest	Howard V. Weems, Sebring	“ “ “	Bartow, October 31, 1941
E—South Central	Carl D. Hoffmann, Orlando	“ “ “	Orlando, November 1, 1941
F—Southeast	Robert L. Elliston, Ft. Lauderdale	“ “ “	Hollywood, October 30, 1941
Alabama Medical Association	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery	April 21-23, 1942
Georgia, Medical Assn. of	Allen H. Bunce, Atlanta	E. D. Shanks, Atlanta	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami	Palm Beach, Apr. 12-13, 1942
State Dental Society.....	I. W. Shields, Miami	W. P. Wood, Jr., Tampa.....	Hollywood, Dec. 8-10, 1941
Soc. of Derm. and Syph.....	Wiley M. Sams, Miami	Lauren M. Sompayrac, Jacksonville	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association	J. S. Stewart, Miami	J. Ralston Wells, Daytona Beach.....	Daytona Beach, Dec. 4-5, 1941
State Hospital Association	Mr. Ernest G. McKay, Tampa	Mr. R. L. Martin, St. Petersburg	
Assn. of Industrial Surgeons	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman	
Soc. of Ophthal. & Otol.....	S. B. Forbes, Tampa	Shaler Richardson, Jacksonville	Palm Beach, Apr. 12-13, 1942
State Nurses Association	Mrs. M. Stetson, St. Petersburg	Mrs. Phyllis Leonard, St. Augustine	Hollywood, Nov. 2-5, 1941
Pathological Society.....	L. Y. Dyrenforth, Jacksonville	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach	Hollywood, Nov. 1941
State Pharmaceutical Association	Mr. Emmett L. Brown, Palatka	Mr. R. Q. Richards, Ft. Myers	Tallahassee, May, 1942
Public Health Association	L. J. Graves, Tallahassee	E. M. L'Engle, Jacksonville	Orlando, December 4-6, 1941
Radiological Society	John N. Moore, Ocala	Walter A. Weed, Orlando	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association.....	Leland F. Carlton, Tampa	W. C. Page, Cocoa	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando	Mrs. C. R. Whitaker, Eustis	Fall, 1941
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Gulf Coast Clinical Society	J. S. Turberville, Century	J. C. McSween, Pensacola	Pensacola, October 16-17, 1941
S.E. Sec., Am. Cong. Phys. Ther.....	Mason I. Lawrence, Atlanta	Kenneth Phillips, Miami.....	Memphis, May, 1942
Southeastern Surgical Congress	Irvin Abell, Louisville	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association	Paul H. Ringer, Asheville	Mr. C. P. Lorz, Birmingham	St. Louis, Nov. 11-14, 1941
Suwannee River Medical Society.....	E. C. Crouch, Jasper	T. H. Bates, Lake City.....	Lake City, December, 1941

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION
COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	William C. Roberts, M.D. Panama City		12	10	A-1-'42 W. C. Roberts, M. D. Panama City
	Escambia *Santa Rosa	W. P. Hixon, M.D. 24 W. Chase St. Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	46	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		7	6	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Thursday	5	4	A-2-'43 C. D. Whitaker, M.D. Marianna
	Jackson *Calhoun	M. Q. Burns, M.D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	Sterling E. Wilhoit, M.D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	41	32	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	11	B-3-'43 J. M. Price, M.D. Live Oak
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	100%	
	Taylor *Dixie, Lafayette	Ralph J. Greene, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	
B	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	J. Maxey Deff, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	30	24	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Marion Levy	Eugene G. Peek, M.D. Commercial Bk. & Tr. Bldg., Ocala	Harry F. Watt, M.D. Box 146 Ocala	3rd Thursday 12:30 P. M.	26	20	
	Pasco-Hernando- Citrus	William B. Moon, M.D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	100%	
	Duval *Clay, Nassau	S. K. Norris, M.D. Medical Arts Bldg. Jacksonville	F. Gordon King, M.D. 422 St. James Bldg. Jacksonville	1st Tuesday 8:15 P. M.	185	183	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
	St. Johns	A. C. Walkup, M.D. East Coast Hospital St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	
	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganious, M.D. Palatka	2nd Tuesday in Feb., Apr. Jun., Aug., Oct., Dec. 7:00 P. M.	11	9	C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	42	
	Hillsborough	Robert G. Nelson, M.D. 712 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	109	85	D-7-'43 John R. Boling, M.D. Tampa
	Manatee	W. E. Wentzel, M.D. Box 245, Bradenton	Wm. D. Sugg, M.D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	
	Pinellas	N. W. Gable, M. D. 116 Field Artillery Camp Blanding	W. C. McConnell, M.D. 313 First Fed. Bldg. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	104	100%	
D	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	16	
	DeSoto-Hardee- Highlands-Char- lotte-Glades	A. T. Eide, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	21	20	D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	M. F. Johnson, M.D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	
	Polk	Bruce R. Tinkler, M.D. Lake Wales	S. Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	61	58	
	Brevard	T. C. Kenaston, M.D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	100%	E-9-'42 Carl D. Hoffmann, M.D. Orlando
	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bk. Bldg. Leesburg	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	20	13	
	Orange *Osceola	Frank D. Gray, M.D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	87	80	
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	10	
	St. Lucie-Okeech- bee-Indian River- Martin	Joseph B. Kollar, M.D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	F-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Ft. Lauderdale	4th Wednesday 8:00 P. M.	41	38	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
F	Palm Beach	Wilbur O. Arnold, M.D. Box 1785 W. Palm Beach	William E. Bippus, M.D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	64	
	Dade	C. Larimore Perry, M.D. 525 N. E. 15th St. Miami	Herbert Eichert, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	337	250	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

1 LB. 2 OZ. NET (510 GR.)

PABLUM

A thoroughly cooked and dried palatable mixed cereal food, vitamin and mineral enriched.

Composed of wheatmeal (farina), oatmeal, wheat germ, yellow cornmeal, powdered beef bone specially prepared for human use, sodium chloride, powdered dehydrated alfalfa leaf, powdered yeast and reduced iron, cooked thoroughly and dried.

Formula devised by Pediatric Research Foundation of Toronto to furnish not only high nutritive value, but also vitamins B₁ and G (niacin) and essential mineral elements (Phosphorus, Iron and Copper).

REQUIRES NO COOKING
Add milk or water, heat and serve with milk or water.

MEAD JOHNSON
EVANSVILLE, IND.

KEEP IT

EATS

The JOURNAL of the Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 4

Jacksonville, Florida, October, 1941

Yearly Subscription, \$3.00
Single Copy, 30c

CONTENTS

THE N.Y. ACADEMY
OF MEDICINE
OCT 27 1941
LIBRARY

Labor in Abnormal Presentations, Robert G. Nelson, M.D., Tampa.....	159
The Role of the Delivery Home in Treating the Low Income Group, James M. Hoffman, M. D., Pensacola	162
Toxemia of Pregnancy, Samuel R. Norris, M.D., Jacksonville.....	164
The Management of Primary Glaucoma, H. J. Blackmon, M. D., Tampa.....	169
The Practicing Physician's Place in Public Health, W. H. Pickett, M.D., Jacksonville.....	173
Labor and the Industrial Surgeon, Leland F. Carlton, M. D., Tampa.....	175
Coordinating the School and Health Program, A. L. Stebbins, M. D., Pensacola.....	176
Editorials: District Meetings, Second Series; Meeting of the Southern Medical Association.....	180
Paul V. McNutt Becomes Director of Health, Welfare and Related Activities.....	181
Violations of Medical Practice Act.....	182
New Flooring Reduces Risks of Foot Infection	182
Children's Bureau Needs Specialists.....	183
Treatment of Physicians Testifying in Court for Government.....	183
Hazards Involved in Treatment with Sulfanilamide.....	183
Births, Marriages and Deaths.....	184
State News Items.....	184
Component County Societies	186
Abstract Department	188
Advertisers' Notes	188
Books Received	188
Index to Advertisements.....	190
Woman's Auxiliary	192
State and Sectional Meetings.....	194
Component Societies by Districts.....	195

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942
Southern Medical Association, St. Louis, November 10-13, 1941



Petrolagar* . . .

As a Bland Cleansing Enema

- The effect of a Petrolagar cleansing enema is to soften thoroughly the inspissated stool, and help establish a complete, comfortable bowel movement. Petrolagar serves this purpose well because it is miscible with water, a virtue that enables an even dissemination of minute oil globules throughout the residue in the colon.

The Petrolagar cleansing enema is preferable to irritating soap solutions in either the home or the hospital, because of its gentle, but thorough softening action.

Consider the routine use of the Petrolagar cleansing enema in the hospital, postoperatively or in obstetrical cases, where normal bowel habits are temporarily disturbed.

HOW TO USE: Mix 3 ounces of Petrolagar Plain with water sufficient to make one pint to one quart, as desired, and administer by gravity. For retention enema administer at body temperature.



**Petrolagar—The trademark of Petrolagar Laboratories, Inc., brand emulsion of mineral oil . . . Liquid petrolatum 65 c.c. emulsified with 0.4 gm. agar in a menstruum to make 100 cc.*



PONTOCAINE HYDROCHLORIDE *in* OPHTHALMOLOGY

Surface Anesthetic with Prolonged Effect

● Tests such as those reported from the Wilmer Ophthalmological Institute of Johns Hopkins Hospital and observations made repeatedly by others in ophthalmologic practice have demonstrated that Pontocaine hydrochloride possesses the characteristics required of a satisfactory surface anesthetic.

PONTOCAINE HYDROCHLORIDE . . .

*acts quickly . . . penetrates deeply . . . does not dilate
the pupils . . . does not increase intra-ocular tension.*

A wide variety of operative and nonoperative procedures may be carried out under surface anesthesia with Pontocaine hydrochloride, including removal of deep seated foreign bodies from the cornea, probing the lacrimal duct, cauterization, treatment of corneal ulcer, tonometry, cataract extraction and trephining and other treatment of glaucoma.

HOW SUPPLIED: For surface anesthesia in ophthalmology, Pontocaine hydrochloride 0.5 per cent solution, in bottles of ½ oz. and 2 oz. To maintain sterility, chlorobutanol (0.4 per cent) is added.



PONTOCAINE

Trademark Reg. U.S. Pat. Off. & Canada

Brand of TETRACAINE

(Para-butyl-aminobenzoyl-dimethyl-amino-ethanol)

HYDROCHLORIDE



Accepted by the Council on Pharmacy and Chemistry of the American Medical Association
Write for booklet giving essential details regarding chemistry, action, indications and manner of use.

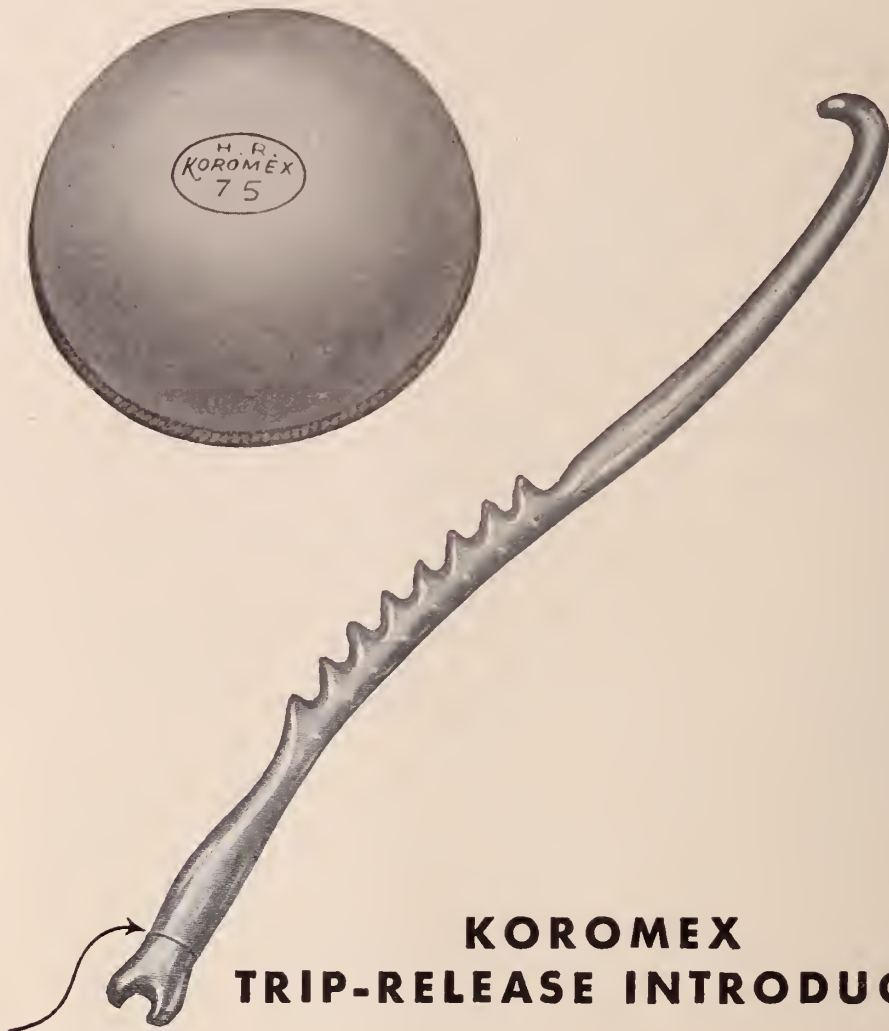
WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.

WINDSOR, ONT.

KOROMEX DIAPHRAGM



KOROMEX TRIP-RELEASE INTRODUCER

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

THESE NAMES, THESE YEARS . . . HAVE HELPED MAKE MODERN MEDICAL HISTORY

1938 Butt, Snell, and Osterberg, also independently Warner, Brinkhous, and Smith, report effective use of vitamin K in abnormal bleeding of obstructive jaundice.

Smith, Ungnade, and Prichard; Bergel, Jacob, Todd, and Work; Karrer, Fritzsche, Ringier and Salomon — almost simultaneously announce the synthesis of vitamin E.

Parke, Davis & Company introduces Dilantin Sodium for the treatment of epilepsy.

1866 1941
SEVENTY-FIVE
YEARS OF SERVICE
TO MEDICINE
AND PHARMACY

One of a series of advertisements commemorating three-quarters of a century of progress and achievement

Parke, Davis & Company

**PIONEERS IN RESEARCH
ON MEDICINAL PRODUCTS**

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of Nervous and Mental Diseases, Alcoholic and Drug Addictions. Especially equipped for the use of **ELECTRO-SHOCK THERAPY**. Elderly people, Convalescents and mild chronic mental cases given very low rates. Too violent and noisy patients not accepted. **DOORS ARE NOT LOCKED.** The Sanitarium is club like.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoye, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

B. MARIAN BEALS

President-Treasurer

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

**Building Heated and Ventilated
Psychopathic Annex—Sound Proof
Window Guards Eliminated
Air Conditioned**



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)

Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive course in Surgical Technique with practice on living tissue, starting every two weeks. General Courses One, Two, Three and Six Months, Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two weeks Intensive Course in Internal Medicine, and Two Weeks Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Twenty Hour Personal Course in Vaginal Approach to Pelvic Surgery November 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

ROENTGENOLOGY—Course in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

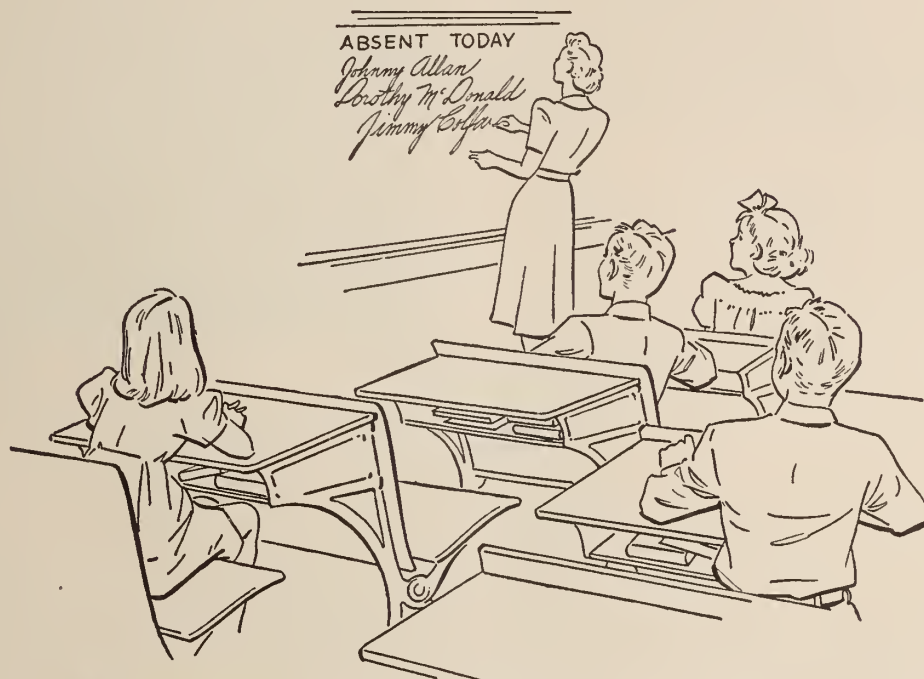
Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

Home with a head cold



When you prescribe Racêphedrine Hydrochloride (Upjohn) for topical use in children, your small patients will find that it relieves nasal congestion

without unpleasant smarting or burning. The reason is that the vehicle used in making the 1% solution is isotonic, and therefore relatively nonirritating.

RACÊPHEDRINE HYDROCHLORIDE (UPJOHN)

is available as:

Solution Racêphedrine Hydrochloride (Upjohn)
1% in Modified Ringer's Solution, in one ounce
dropper bottles for prescription purposes, and in
pint bottles for office use

Capsules Racêphedrine Hydrochloride (Upjohn),
 $\frac{3}{8}$ grain, in bottles of 40 and 250 capsules

Powder Racêphedrine Hydrochloride (Upjohn),
in $\frac{1}{4}$ ounce bottles



If the patient reclines on the side with the head at an angle of about 45°, a decongestant solution applied to the lateral aspect of each nostril will reach the orifices of the nasal sinuses of both sides.

Upjohn

KALAMAZOO, MICHIGAN



Fine Pharmaceuticals Since 1886

FOR ANGIOSCOTOMETRY

USE THE STEREO CAMPIMETER BY AMERICAN

The study of central visual fields, including Angioscotometry, one of the most recent clinical developments, can be carried out under ideal conditions with the Lloyd Stereo Campimeter by American. The requirements of steady fixation, stereoscopically maintained; accommodative compensation, by virtue of the collimating lens, and equalized illumination of the test field, are fulfilled as in no other instrument of its type. The AO Lloyd



PATENTED

Stereo Campimeter is only one of the many outstanding ophthalmic instruments being produced by American Optical Company and Spencer Lens Company, its Scientific Instrument Division.



BY AMERICAN OPTICAL COMPANY

--- in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928



REGISTERD SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician, Complete Physical Therapy, Four
Acres Beautifully Landscaped Grounds, Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Convenient
Site High and Healthful

E. W. ALLEN, M.D., *Department for Men*

H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE
Florida Medical Ass'n Convention
APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

"Bricks, travertine marble, and apparatus cannot solve problems or make discoveries but may be tremendously useful at the command of knowledge and skill."

SECONAL

(Sodium Propyl-methyl-carbinyll Allyl
Barbiturate, Lilly)



'Seconal' fulfills the requirements for a hypnotic in the majority of medical and surgical patients. Action is prompt, the period of sleep is restful, aftereffects are negligible. 'Seconal' has definite uses in insomnia, nervousness, extreme fatigue with restlessness, and similar conditions where only a brief sedative effect may be required to allow onset of natural sleep.

Supplied in 3/4-grain and 1 1/2-grain pulvules in bottles of 40 and 500.

ELI LILLY AND COMPANY

Principal Offices and Laboratories, Indianapolis, Indiana, U. S. A.

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, October, 1941

Number 4

LABOR IN ABNORMAL PRESENTATIONS

ROBERT G. NELSON, M. D.

TAMPA

To qualify as an obstetrician, one must strive to possess an accurate knowledge of the many phases of obstetrics and at the same time endeavor to acquire wisdom in dealing with its many problems. To say which subject pertaining to this specialty is the most important would provoke unnecessary argument, but I believe that I can say, without fear of contradiction, that "Labor in Abnormal Presentations" is of primary interest.

All presentations are classified as abnormal except the spontaneous types of vertex presentation. This classification is based upon the fact that the frequency of occurrence of the vertex presentation indicates that it is the one best adapted by nature for vaginal delivery.

It is true that such a classification places in the group of the abnormal a number of presentations which permit spontaneous delivery. Not only do certain presentations permit of a spontaneous outcome, but they also possess a regular mechanism of passage through the birth channel. Notable among them are presentations of the face and of the breech. These two, however, constitute such a small percentage of all presentations and are so often interrupted by complications that they cannot be considered normal. The other abnormal presentations, such as the brow, transverse and parietal presentations, possess no definite mechanism of delivery, and birth occurs spontaneously only under the most fortuitous circumstances.

In dealing with abnormal presentations, careful attention must be paid to their cause. The presence of a transverse or a brow presentation indicates that something is wrong either in the structure of the fetus or in the contour of the birth canal. As great care should, therefore, be exercised in trying to determine the cause of the abnormality as in making a diagnosis of the malpresentation itself. The necessity for so do-

ing is evident upon considering the rationale of treatment, for the method of delivery is usually guided by concomitant conditions of the fetus and of the birth canal.

Time will not permit a discussion of all abnormal presentations. Consequently, I have elected to take up the transverse presentation as the main theme, but before doing so I shall briefly mention the various other abnormal presentations.

The persistent occipitoposterior and complete occipitoposterior positions are not essentially abnormal presentations; rather, they are complications of a mechanism which is usually normal and spontaneous. They occur most frequently in that type of labor in which the vertex engages with the occipitoposterior position to the transverse line of the pelvis. In the conduct of delivery in the presence of the occipitoposterior position, however, certain points should be held in mind. In the first place it should be remembered that labor will terminate spontaneously in the majority of instances, possibly in from 90 to 95 per cent of the cases, if given sufficient time. During this time the obstetrician should pursue a policy of resourceful and watchful waiting.

Interference may be required when the fetal head, upon reaching the pelvic floor, fails to rotate from its posterior position. This delayed rotation or persistent occipitoposterior position is for all practical considerations the same as deep transverse arrest. Again interference may be required in those instances in which the fetal head, upon reaching the pelvic floor, rotates one eighth of a circle posteriorly instead of three eighths of a circle anteriorly. The net result of faulty posterior rotation is to bring the occiput into the hollow of the sacrum and thereby constitute a complete occipitoposterior position.

Breech presentation obtains when the axis of the fetus lies in the axis of the birth canal with the pelvic pole presenting at the outlet. While the breech presentation cannot be considered a normal one, it nevertheless permits a spontaneous outcome by a definite mechanism of labor. The successful outcome of the breech mechanism depends upon proper proportion be-

A symposium on Obstetrics was presented before the Sixty-eighth Annual Meeting of the Florida Medical Association, held at Jacksonville, April 28, 29 and 30, 1941. It comprised the first three articles published in this Journal. The discussion follows the third article.

tween the fetus and the pelvis, and upon preservation of an attitude of universal flexion of the fetus throughout labor. Labor in breech presentation is generally longer and more trying than in vertex presentation.

In view of the danger to the baby it is altogether proper to endeavor during the last weeks of pregnancy to alter the presentation by external cephalic version. Breech presentation in primigravidas who are over 35 years of age or in whom the pelvis is of questionable dimensions, may be delivered justifiably, often preferably, by elective cesarean section, for in these instances the mechanical difficulties of vaginal delivery are such as to greatly imperil the life of the baby. When, however, the breech presentation cannot be altered and the proportion of the child to the pelvis is normal, the delivery should proceed by the vaginal route.

The term face presentation is applied when the forecoming head enters the pelvis in complete extension. In the average case, face presentation follows a definite mechanism of spontaneous delivery, provided there is no disproportion between the fetus and the pelvis, and labor should be allowed to proceed without interference. It is justifiable to endeavor early in labor to effect conversion into a vertex presentation, but the attempt is not easy and not always successful. When the presentation is associated with a contracted pelvis, or an obstructive lesion, elective or early cesarean section is the operation of choice. When the presenting fetal head is in an attitude of partial extension, the brow overlies the center of the pelvic inlet. Brow presentation may be of a transient or a permanent nature. The transient brow presentation is converted either by flexion into a vertex or by extension into a face presentation. In persistent brow presentation no such spontaneous conversion takes place, the head being arrested at the pelvic inlet by the long occipitomenal diameter, and no mechanism of labor occurs. The management of persistent brow presentation is very similar to that of transverse presentation.

The term parietal presentation refers to the condition when the head is deflected to one side and the parietal bone is presented at the pelvic inlet. This presentation is produced by contraction of the pelvic inlet, which interferes with the normal adaptation and engagement of the fetal head. In all instances of parietal presentation it

is well to look upon spontaneous delivery as impossible.

A compound presentation obtains when two or more of the fetal parts present simultaneously at the pelvic inlet or in the pelvic cavity. The one most frequently encountered is that of the head and hand.

Transverse presentation exists when the longitudinal axis of the fetal ellipse lies more or less at right angles to the axis of the maternal birth canal. As there is no mechanism of birth, as such, associated with this presentation, I shall attempt to present the condition more or less in detail. Any part of the fetus, other than the head or breech, may present. The common presentation is the shoulder; the corresponding hand and arm often prolapse into the vagina during labor. Presentation of the lateral surface of the chest and abdomen occurs rarely.

Transverse presentation occurs in about one of every 250 cases of full term labor. It is met with four times more frequently in multiparas than in primiparas. The factors which predispose to its occurrence may be grouped as follows:

- (1) Conditions of the maternal birth canal which permit extraordinarily free movement of the fetus in utero, namely, imperfect uterine and abdominal tone and polyhydramnios.

- (2) Conditions of the fetus which are conducive to prenatal mobility, namely, prematurity and intrauterine death before the onset of labor.

- (3) Obstacles to the adaptation of a normal presenting part of the inlet, namely, contracted pelvis, placenta praevia and tumors of the lower uterine segment.

- (4) Asymmetry of the uterus which interferes with the normal longitudinal position of the fetus, namely, marked obliquity of the uterus, uterus subseptus and fibromyomas of the uterus.

- (5) Miscellaneous factors, namely, second of twins and abnormal shape of the child owing to tumor or malformations.

In cases of transverse presentation the patient complains during the latter weeks of pregnancy of an unusual amount of distress and a feeling of weight in the lower part of the abdomen. None of the symptoms are, however, peculiarly characteristic of the malpresentation. The diagnosis is made in the following manner:

- (A) Abdominal Examination. Inspection reveals that the maternal abdomen is enlarged

more in the transverse than in the longitudinal axis. The epigastric region is flattened, and the flanks bulge.

On palpation no fetal part is felt in the fundus of the uterus. The hard, round, fetal head, subject to ballottement, is felt in one iliac fossa, and the irregular breech is felt at a higher level in the opposite flank. There is no presenting part palpable at the inlet. Upon Pawlik's grip, the fingers of the examining hand sink deeply between the shoulder and the pelvis.

On auscultation the heart sounds are heard at or slightly below the level of the umbilicus at a variable distance from the midline. The point of maximum intensity helps in no way in making a diagnosis of the position.

(B) Pelvic Examination. Pelvic examination before the onset of or very early in labor gives less information than the abdominal examination. The fetal parts are high and are reached with difficulty by either the rectal or the vaginal route. When the cervix is not dilated and the membranes are unruptured, the most that the examining fingers can feel are fetal parts of irregular contour.

As labor advances, the value of the two methods of examination is reversed. The abdominal examination becomes less satisfactory because the fetal body becomes molded by uterine contractions into a compact spherical mass. The fetal head becomes increasingly difficult to palpate because it is firmly pressed against the chest and is covered by the vigorously contracting uterine muscle. On the other hand, the findings of a pelvic examination become more clearcut as labor proceeds. When the cervix is partly dilated and the membranes are ruptured, the shoulder is pressed firmly against the inlet, and the characteristic features of the presentation are in evidence. Upon vaginal examination at this stage, the peculiar "gridiron" sensation imparted by the fetal ribs is felt. The acromion process is palpable; from it radiate the bony ridges of the humerus, the scapular spine and the clavicle. The apex of the axilla points in the direction of the fetal head.

Not infrequently the arm prolapses into the vagina, and the hand may protrude from the vulva. If the hand is not visible, it may upon palpation be easily identified by the length of the digits and the absence of a heel. When the hand and arm are straightened out, the position

of the fetus may be determined from their attitude. The thumb points in the direction of the fetal head. When not certain of the findings from an examination the obstetrician may employ roentgen studies.

To emphasize, I repeat that there is no mechanism of birth in a transverse presentation as such. Unless nature or the obstetrician changes the position to a longitudinal one, the forces of expulsion are fruitlessly expended, and death eventually claims both mother and child. Nature occasionally accomplishes one of the following fortunate transformations.

(1) Spontaneous Rectification. In multiparous patients in whom the transverse presentation is caused by imperfect uterine and abdominal tone, the taking up of the uterine wall in the early contractions of labor may shift the head from the iliac fossa to the pelvic inlet, thus rectifying the transverse position by changing it into the vertex presentation.

(2) Spontaneous Version. Less frequently the early contractions may shift the breech to the inlet, the labor then proceeding as in a breech presentation.

(3) Spontaneous Expulsion. A small, premature, dead fetus may be expelled doubled up on itself.

(4) Spontaneous Evolution. By a process described, but which rarely occurs, the fetal head may be pivoted on one side of the false pelvis, the neck greatly stretched and the shoulder deep in the pelvis. Successively the chest, abdomen, breech and lower extremities are forced by the head and are expelled. Lastly the shoulder girdle and head become dislodged and are likewise expelled. It is virtually impossible for the birth of a full term fetus to take place in this manner.

When nature fails to correct the malpresentation and the attendant also fails to recognize and correct it, the course of labor is as follows:

The onset of labor takes place as usual, but the first stage may never be completed. The free communication of the forequarter and hindquarter transmits the full force of the uterine contractions to the dilating membrane, which is pushed through the cervical os in a finger-like process that ruptures long before dilatation is completed. The amniotic fluid is then completely expelled.

The uterus contracts down upon the fetus

and endeavors to force it through the birth canal. The expulsive forces are expended fruitlessly. The upper segment retracts, shortens and thickens; the lower segment stretches over the fetal shoulder and head, becomes attenuated and edematous and threatens to rupture. The presenting shoulder is forced deeper into the pelvis, and the head is impacted against the chest.

At this juncture one of several events may occur:

(1) Death of the mother from exhaustion and shock.

(2) Rupture of the thinned-out lower uterine segment with resultant hemorrhage, shock and death.

(3) Secondary uterine inertia. The uterus, exhausted by the efforts of expulsion, may pass into a condition of relaxation, which simply postpones the inevitable outcome if the case is untreated. During such a period of neglect, the fetus usually dies. Occasionally it clings to life with a surprising pertinacity.

The treatment of transverse presentation must be conducted with attention, first, to the causative conditions and, second, to the period of pregnancy or labor in which the patient is first seen. If labor is under way, one must not wait for nature to deliver the patient, but must prepare to do so by one of the three available methods, version, cesarean section, or embryotomy. The choice of the operation depends upon the circumstances of the individual case.

When the vaginal route presents no obstruction to the passage of a living fetus, the various types of version may be employed.

(1) External cephalic version should be attempted just before or at the onset of labor. An effort should be made to maintain the corrected position by placing pads on each side of the fetal trunk and holding them in place with an abdominal binder.

(2) Combined podalic version has a limited application. It is difficult with two fingers through the cervix to dislodge the shoulder and hook a leg down into the vagina. The operation is only applicable rather early in labor.

(3) Internal podalic version, followed by extraction, offers in the majority of instances the most successful method of treatment of transverse presentation. The failure to obtain sufficient dilatation of the cervix for the safe performance of the operation is the chief dif-

ficulty. Generally some artificial method of cervical dilatation must be employed. When the cervix is soft, the manual method is best.

Each hour that passes after rupture of the membranes increases the danger of internal podalic version. The operation is associated with the grave danger of rupture of the uterus when the lower segment is thinned out and edematous. If the operation is attempted late in labor, there must be sufficient anesthesia to relax the uterus thoroughly, and the maneuver must be executed with extreme care.

Cesarean section should be employed as an elective operation when the transverse presentation is produced by obstacles at the pelvic inlet, namely, contracted pelvis, placenta praevia and fibromyomas. After labor has proceeded for some time with ruptured membranes, this operation becomes a dangerous procedure. If employed at such a time for reasons peculiar to the individual case, it should be followed immediately by amputation of the uterine body.

When the fetus is dead, delivery by embryotomy is indicated. The prognosis in transverse presentation depends upon the promptitude with which the malpresentation is recognized and the skill with which it is treated.

712 Citizens Bank Bldg.

THE ROLE OF THE DELIVERY HOME IN TREATING THE LOW INCOME GROUP

JAMES M. HOFFMAN, M.D.

PENSACOLA

In recent years published statistics have revealed that the maternal mortality in this country has been much too high, particularly in the Southern states. There is no necessity to discuss the various factors involved as I am sure that all members of the medical profession are interested in this subject and have drawn their conclusions. The profession cannot remedy all the factors involved, but surely the individual members can and ought to try to remedy those with which they are directly associated. We, in Pensacola, feel that we have an answer to one phase of this condition which plays an important part in maintaining the high rate, namely, home deliveries under unsatisfactory conditions and under incompetent supervision.

Read before the Sixty-eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, April 28, 29 and 30, 1941. (See footnote, page 159).

In 1933, during the regime of the Federal Emergency Relief Administration, a small residence was rented and used as a maternity home. When this agency was discontinued, the local director, a layman, consulted with several local physicians relative to carrying on the project. From this humble beginning the Pensacola Maternity Home was born. There are available 7 beds in the small building the Home has continued to use up to the present time. It will soon move into a new building, which will have 20 beds with modern facilities. The new building was obtained through the generosity of local persons and the aid of a legacy. It was constructed as a project of the Works Progress Administration, sponsored through the city government. In the old building the equipment was crude; now there will be every modern facility.

ADMINISTRATION

The Pensacola Maternity Home is governed by a board consisting of several interested laymen and several physicians. This board carries on the financial affairs of the institution. All medical government is in the hands of the medical staff, which consists of all the local physicians who practice obstetrics. Membership on the staff is voluntary. Only physicians who are members of the staff are allowed to treat patients in the hospital. The chief nurse of the County Health Unit serves the nursing staff in an advisory capacity. Regular inspections of the hospital are made by the Children's Bureau of the Department of Labor. After the patients are discharged from the hospital, the nurses of the County Health Unit visit them at their homes and report conditions to the attending physicians when requested, or to the respective outpatient clinics.

PERSONNEL

The nursing staff is supervised by a graduate nurse, who is paid by the Maternity Home. The graduate nurses who serve are provided by the WPA Nursing Project and are paid by the WPA. Two practical nurses are employed, who perform the simple duties about the patients' rooms. In addition, a laundress and cook are employed and are paid by the Maternity Home. When the Home moves into the new building, the Children's Bureau will provide a trained obstetric nurse to supervise the nursing personnel.

The Maternity Home pays the salary of an investigator, who inquires into the financial condition of the applicants for admission. Applications are filed through the prenatal clinic or through private physicians. Whenever possible, this investigator collects the admission fee before the patient is ready for delivery.

FINANCING

The principal source of revenue is from the patients. No patient is accepted whose income is more than \$75 a month. The other source of revenue is from the Community Chest. The Home has been able to operate under a charge of \$7.50, flat rate, a patient. Many are not able to pay this fee, but pay as much of it as they can. With the payment of salaries by the WPA and additional financial assistance from the Children's Bureau and the State Board of Health, equipment has been gradually added. It is likely that with the added expenses of a larger institution the charges may be raised to \$9 or \$10.

MEDICAL STAFF

As mentioned before, all members of the County Medical Society who practice obstetrics are invited to join the staff. The patients who are able to pay their physician something are admitted as private patients of that physician, who attends them throughout, in his office and at the hospital. Those who are unable to pay a physician are sent to the prenatal clinic, which is operated through the County Health Unit, but conducted by members of the Maternity Home staff. The patients from the clinic are delivered by the staff in rotation, each serving for one month at a time. The cards with clinical data are sent from the prenatal clinic to the hospital at the time of admission. The Children's Bureau sends a monthly check, which is given to the staff member serving each month. Follow-up of these patients is accomplished through the prenatal clinic, in which they are checked by the physician or physicians serving there at the time.

Two members of the staff of the hospital are designated as consultants. Their services are available to members of the staff in this clinic as well as at delivery.

Monthly meetings of the staff are held, at which time complications, mortality and morbidity are discussed freely. The staff has supervision of all medical matters, but does not employ personnel. Its recommendations in these matters, however, are followed by the board.

RESULTS

1. At this time, very few white babies are delivered in the home in Escambia County.
2. There are no white midwives practicing in Pensacola.
3. The maternal mortality rate has gradually dropped.
4. The incidence of eclampsia has been materially lessened.
5. Severe postpartum complications such as hemorrhage and infections are not observed as they formerly were.

CONCLUSIONS

The establishment of a maternity home in the community serves a vital need at a minimum expense.

1. It is an answer to the popular trend leading to state medicine because it provides adequate competent service to the indigent and semi-indigent. Through participation in the Community Chest, the public feels that it has a part in its success.
2. It materially reduces maternal mortality and morbidity as well as infant mortality by providing adequate prenatal, delivery and postnatal care. By cooperation with state and national health bodies it forestalls the organization of a similar setup through these agencies.
3. It eliminates the "pauperizing" of persons of low income by charging them for services, even though their payments may be small. Proper investigation prevents them from obtaining service of charity to which they are not entitled.
4. It does not compete with the private hospital which provides obstetric service to those able to pay.
5. The medical profession has a direct hand in the running of the institution and there is no disturbance of the physician-patient relationship. The physician may secure fees from patients when they are able to pay.
6. It provides a place for training young physicians and those who attend few obstetric cases by giving opportunity for routine observation of technics that are supervised.

I sincerely trust that more physicians will interest themselves in providing similar facilities in their own communities that we may proudly say that we are lowering the maternal and infant mortality in the United States by a concerted effort of the medical profession. I respectfully request that you gentlemen consider

the possibility of organizing similar institutions in the smaller counties and communities. The burden of reducing the maternal mortality rests upon the leadership of the obstetricians of this country.

1221 E. DeSoto Street.

TOXEMIA OF PREGNANCY

SAMUEL R. NORRIS, M. D.
JACKSONVILLE

The title "Toxemia of Pregnancy" is an all inclusive, scientifically vague phrase used for want of a better name to describe a particular chain of symptoms associated with the pregnant state. There have been many attempts to classify and subdivide the toxemias into certain types, as well as countless theories to explain their etiology. There is still no unanimity of opinion as to cause, each worker strongly advocating his own theory.

To help work toward a more uniform classification the American Committee on Maternal Health in 1937 appointed a committee consisting of R. D. Mussey, E. T. Bell, F. S. Kellogg, W. W. Herrick and H. J. Stander to present the most simple and workable classification they could agree upon. They proposed: (1) hypertensive disease, (2) renal disease, (3) preeclampsia severe and preeclampsia mild, (4) eclampsia, (5) vomiting of pregnancy, (6) acute yellow atrophy of the liver and (7) unclassified.

In this paper it is my purpose to discuss only those cases coming under the first four classifications. To clarify, I might state that severe preeclampsia refers to those conditions that in most classifications have been called preeclampsia. Mild preeclampsia includes those characterized by a slight rise in blood pressure, albuminuria in some degree and perhaps edema during the latter part of pregnancy. These symptoms usually disappear completely shortly after delivery. It has been labeled low reserve kidney, albuminuria of pregnancy and kidney of pregnancy.

Renal disease includes all diseases of the kidney, including chronic nephritis of all types, and these conditions are catalogued by the past history, present signs and symptoms, laboratory and chemical findings, and changes in the eyegrounds. Hypertensive disease, just as renal disease, is not a toxemia of pregnancy, but is included in this classification because it is often recognized for the first time during pregnancy,

Read before the Sixty-eighth Annual Meeting of the Florida Medical Association, held at Jacksonville, April 28, 29, and 30, 1941. (See footnote, page 159).

frequently is aggravated by the added strain of pregnancy and in certain features simulates preeclampsia as well as renal diseases. In this condition the most characteristic feature is the rise in blood pressure without the usual signs of renal involvement. The past history, first appearance and course of the hypertension, the laboratory findings, the changes in the eyegrounds and other signs and symptoms properly evaluated all help toward a correct diagnosis. Frequently these types overlap or one is superimposed upon another as, for example, an eclampsia added to vascular or vascular-renal disease. In some cases the diseased conditions may be unscrambled by time and properly classified; in some they will remain confused. I should advise a careful perusal of this committee's report, published in the American Journal of Surgery, April 1940.

The literature has been flooded with reports of experimental work of all kinds, surveys of large series of cases and numerous theories as to cause and mechanism. The only excuse for presenting the subject again, since I have nothing original to add, is that it may be helpful for emphasis. The leading cause of maternal deaths in Florida is toxemia, which accounted for 33 per cent of these deaths in 1938. So, even though the etiology is still to be proved, the profession evidently is not utilizing all the knowledge at its command. As individual members, we can and must improve our results.

In reviewing the cases of toxemia seen in consultation and those sent into the hospitals of Jacksonville from neighboring communities during the last sixteen years, I have arrived at certain conclusions and have made a few observations. I believe that in the large majority of cases the toxemia could have been prevented, or its severity minimized. The treatment of many of these cases has been inadequate, ill timed, ill advised, or unwisely applied to the individual case.

In a great many instances the unfortunate patients had had absolutely no medical supervision. Naturally we as physicians cannot be held personally culpable for such cases arising. Nevertheless it is the duty of the medical profession to take the lead in educating the public to the need of adequate antepartum care, to help establish clinics and to give its services freely when needed, to the end that none may truthfully say

that a woman suffered from or died of toxemia because she could not secure advice and treatment from a physician.

But what about the severe toxemia which develops while the patient is under the care of a physician? I believe that the cases of severe preeclampsia and eclampsia classified as groups 3 and 4, could in large measure be prevented. It is not possible to prevent the onset of all the mild toxemias, but constant alertness and prompt treatment, or early interference when proper treatment fails, should forestall severe preeclampsia and convulsive states in the majority of cases.

Now why do these severe complications develop in so many patients while they are under a physician's supervision? I believe it is because many physicians do not realize the serious potentialities of the early mild symptoms as, for example, a systolic blood pressure ranging from 130 to 150, maybe a trace of albumin with or without visible edema and a sudden gain in weight. We become very busy attending sicker patients in a wide general practice for our obstetric patients do not complain of toxemia. They do not know they have these symptoms, and neither do we unless we see them frequently. So we ignore, neglect, or inadequately treat these early warning symptoms. And before we realize the seriousness, we suddenly find ourselves confronted with a severe preeclampsia or actual eclampsia. Antepartum care is something besides merely recording the blood pressure and the result of urinalysis at regular or irregular intervals. We must see that all foci of infection are eradicated, that anemias are treated, that endocrine dyscrasias are corrected when possible and that diet, exercise, rest and elimination are properly supervised. At the first appreciable rise in blood pressure, from 110 to 130 or 140 systolic, we should advise increased rest including complete bed rest at times, secure adequate elimination, reduce the intake of salt, maintain proper fluid balance and administer mild sedatives. Certainly we should not wait until the urine gives a 4 plus reaction for albumin or shows albumin at all, for this condition usually occurs late.

Frequent and regular recordings of weight are a most valuable watchdog in guarding patients from severe toxemia. A sudden gain in weight with or without visible edema in the last trimester of pregnancy warns of an accumulation of free fluid in the tissues. Whether this re-

sults from faulty chemistry of chlorides, pressure from the enlarged uterus, or increased permeability of the capillaries, bed rest is the most effective single treatment.

To be more specific, I advise all patients to take the reclining posture several times a day in the last two or three months of pregnancy. It is well to warn them against sitting too long at a time as they are inclined to do at bridge, social affairs and moving pictures. At the first abnormal gain in weight, 3 pounds or more in two weeks, I advise complete bed rest for from twenty-four to forty-eight hours. Usually this gain occurs without a rise in blood pressure. There is absence of urinary symptoms, and often no edema is observed. Frequently these patients lose the extra weight, which is mostly fluid. I advise them again about frequent bed rest and have them report once or twice weekly. If the gain in weight is particularly excessive and is accompanied by a slight rise in blood pressure, and if they do not lose weight on bed rest, I restrict the intake of salt and secure fluid balance, sometimes administering 1 Gm. of ammonium chloride every three hours. The point I wish to stress is prompt bed rest for abnormal gain in weight before the appearance of other signs of toxemia. I believe this to be of great importance in the prophylaxis of toxemia.

Ships head for port when the barometer first begins to fall; they do not wait until the storm actually strikes. But a good many physicians do wait in cases of toxemia. Even when the systolic blood pressure ranges from 160 to 180 with albumin present and a considerable degree of edema, the patient is still allowed to be ambulatory and is given a saline laxative with nothing else advised. It is only when the complaint is of violent headache, reduced vision, or an actual convulsion that it is felt something further is required. Such is the history of many of the cases of toxemia that I see in consultation or that are brought into the hospitals.

The mistake here has been to allow these cases to continue too long before termination. When there is progressive edema, great gain in weight and increasing rise in blood pressure and amount of albumin, patients should be hospitalized when possible, or given complete bed rest at home. If no improvement is shown after a few days of complete bed rest with the usual standard treatment of elimination, sedation,

dehydration, low intake of salt, intravenous injections of glucose or magnesium sulfate or both, and proper diet, the pregnancy should be interrupted in the interest of the mother and often of the baby. Frequently anxiety for the child causes an attempt to carry the mother nearer to term, and so the baby is lost. A baby delivered prematurely often has a better chance of survival than one carried too long by a mother in a toxic condition. And follow-up studies have shown that every day during the period of severe preeclampsia permanent damage can be done to the vascular-renal and hepatic systems, thereby materially shortening the life span.

The treatment of eclampsia is given in all modern textbooks and periodicals. I wish to stress conservative treatment. Do not employ cesarean section for eclampsia of itself or resort to the outmoded methods of delivery by accouchement force. Treat obstetrically; avoid general anesthesia as much as possible. Do not overdose with morphine for this practice is dangerous for both mother and baby.

There follows the report of a case of fulminating toxemia of pregnancy that recently came under my observation. It presents many interesting phases of obstetrics and illustrates many important points of therapy.

REPORT OF CASE

The patient was a primipara aged 27 whose pregnancy followed a normal course until a convulsive seizure occurred at home with none of the usual prodromal symptoms except a sudden gain in weight. The history was irrelevant except for mild nausea of short duration at the beginning of pregnancy.

On Feb. 13, 1941, six days before the onset of the convulsion, the patient showed a gain in weight of 9 pounds in a two weeks' period, up to which time the gain had been normal. At this time the blood pressure was 110 systolic and 70 diastolic, urinalysis gave negative results, and there was no visible edema. She was put to bed, and given salines. Four days later the blood pressure was 120 systolic and 70 diastolic, and there was a gain in weight of 4 more pounds, but no other symptoms were observed. The same treatment, consisting of bed rest and the administration of salines, was continued; the intake of salt was restricted, and thyroid 1 grain twice daily was given. She was to report back in three days.

On the morning of the third day, one week from term, the patient had a sudden convulsion of about two minutes' duration. She was admitted to the hospital immediately. The blood pressure was 150 systolic and 100 diastolic; there was no visible edema, nor was she in coma. The urine contained albumin (2 plus) and a few finely granular casts. Examination revealed that the cervix was soft, effaced and dilated 2 fingerbreadths. About 10 a.m. the membranes were punctured to induce labor, and 6 grains of nembutal was given by rectum. Contractions began in the early afternoon and were irregular and of moderate intensity until about 11 a. m. next day. At that time dilatation was complete; the head of the fetus was high with the occiput posterior. No more convulsions occurred, and there was free uri-

nary output during labor. Magnesium sulfate was given twice intravenously, and 1/6 grain of morphine was given once. The blood pressure ranged from 140 to 170 systolic and 90 to 120 diastolic.

Podalic version and extraction were done about 11:20 a. m. Uterine hemorrhage was free, and the placenta was delivered easily. The uterus, however, failed to respond to the usual oxytocics, pitocin and ergotrate given intramuscularly and pitocin intravenously; it was packed tightly. As the hemorrhage continued, the packing was removed, and the uterus was repacked. It was still soft and relaxed. In the meantime acacia and glucose were being given. A transfusion of 650 cc. of blood was given at 1 p. m. Another of 500 cc. was started at 2 p. m., and by this time the patient was out of the initial shock and in fair condition. Because the uterus was still relaxed and the hemorrhage was continuing, it was deemed necessary to remove the uterus. Immediately a hysterectomy was quickly done. Shortly after returning to her room the patient again went into extreme shock and, a donor being unavailable, 250 cc. of blood plasma was given. At 4 p. m. 500 cc. of blood was given, and the patient reacted well. The blood pressure had risen to above 100 by 6 p. m. At about 8 p. m. it began to fall and at 9 p. m. was 68. At this time 5 cc. of adrenal cortex hormone was given intravenously, and the dose was repeated in one hour. The blood pressure began to rise and by morning was 120.

The patient had a severe chill on the second postoperative day and another two days later. The rectal temperature rose to 103 F. on three successive days. The urine was loaded with pus. Treatment with sulfathiazole was started on the fourth postoperative day. The temperature gradually came down, and the urine cleared of pus. An abscess in the abdominal incision was found on the tenth postoperative day, and from then on improvement was steady. On March 21 physical examination by an internist revealed that the blood pressure was 128 systolic and 92 diastolic; the eyegrounds reacted negatively and the only significant finding was an apparent secondary anemia. On April 8 the hemoglobin estimation was 70, the erythrocyte count was 4,780,000, and the wound had healed nicely.

The uterus on removal was soft and boggy, and the pathologist's report shows why it failed to contract. "Organ is enlarged and boggy. The cavity is distended and filled with a soft blood clot, which is part of a dissecting hematoma or hemorrhage that burrows into and behind the endometrium of the fundus portion." The report of the microscopic examination follows. "There is marked fibrosis in the myometrium, in the form of a wide band of hyalinized connective tissue separating the endometrial layer and the hematoma. The arterial walls look uniformly normal. The deeper layers of the myometrium are edematous."

This case exemplifies the value of hospital care, for without the skillful cooperation and help of the whole hospital staff, surgeons, nurses and laboratory workers, this patient would have died. Too many things had to be done simultaneously and quickly for one man to cope with them alone. It shows the value of and necessity for adequate amounts of blood to replace that lost. Too many patients have died in the past for lack of blood given in sufficient amounts and given quickly enough. There were 1,650 cc. of blood, 250 cc. of blood plasma, and 1,500 cc. of glucose by intravenous injection given this patient in a period of about five or six hours. It also shows the time-saving value of blood plasma,

the importance of diagnosis and skillful surgical procedure, the proved value of adrenal cortex and sulfathiazole, and the potential danger of sudden gain in weight during pregnancy even without other significant findings; too, it demonstrates that the grace of God is still with us.

Medical Arts Bldg.

DISCUSSION

DR. M. C. WILSON, Miami: I wish to congratulate Dr. Norris on the successful handling of the very interesting case that he has presented. In the broad scope of the paper he has covered the subject so well there is little left to be added either from a didactic or a scientific standpoint.

I think a closer classification can be made by including in Group A the cases in which patients have a definite history of former renal damage, such as may result from scarlet fever, diphtheria, acute or chronic nephritis and hypertensive disease. Group B then includes the cases of all patients, apparently well, who first present themselves for antepartum care during pregnancy.

The crux of care of the toxemia of pregnancy is to be constantly on the watch for any signs of toxemia, manifested by slight increase in blood pressure, slight increase above the normal gain in weight and a faint trace of albumin. Patients with these symptoms should be considered in a dangerous condition that may grow worse and result in death. All practitioners, therefore, who care for such cases have a great responsibility placed upon them, and it is on this responsibility and the conscientious care required that success or failure in handling the case and the ultimate successful outcome for the patient depend. The attending physician should consider these patients as dangerously sick as if they had cancer, incipient tuberculosis, pneumonia, or a possible tubal pregnancy.

Extreme care in the management is the answer to the problem. It is best to inform the patient herself, her husband or mother, or other members of the family as soon as slight symptoms of the toxemia of pregnancy manifest themselves, and even though one frightens the patient and her family, their help in encouraging her to follow instructions to the letter may mean ultimate success or failure in the termination of the pregnancy.

If the symptoms become a little more pronounced by reason of a further rise in blood pressure, urinalyses should be recorded daily, or twice a week at least. As soon as a normal healthy woman, who has had an initial blood pressure of 110 systolic and 70 diastolic, has an increase in pressure to 130 systolic and 90 diastolic, she should be considered as a possible candidate for a death certificate. It is indifference to the seriousness of the condition that causes physicians and attendants to allow a case to drift along until suddenly they are confronted with a tulminating eclampsia.

The physician should put the burden of responsibility on the family and assure them that it is no fault of his that these symptoms of toxemia are developing and that he is doing everything known to science to help the patient. He should not let financial consideration enter into the care of the patient and should insist on early hospitalization even if the patient must borrow money on her life insurance or automobile. Labor should be induced early if hospitalization does not stop the gradual progress of the disease. One may as well forget the baby, as both mother and baby may be lost by trying to hold too near the danger line. Consultation with the best man in the community should be called for early.

DR. CHARLES J. COLLINS, Orlando: This has been an excellent presentation of a most timely subject. Last year as a member of the State Maternal Welfare Committee I found that it was our function to review the maternal deaths in Florida for the previous year, to attempt to classify the deaths as preventable or nonpre-

ventable and also to endeavor to fix the responsibility for preventable deaths, placing it on physician or patient, or both. This was obviously a task neither easy nor pleasant, but to my mind the three most outstanding omissions on the part of the physicians were the failure to terminate pregnancy early enough in cases of progressive toxemia, the ill advised use of cesarean section and the neglect of adequate restoration of blood following its loss from hemorrhage.

Dr. Norris has emphasized these three errors of judgment in his discussion. It is a good general rule in obstetrics to treat the complication and for the time being at least to disregard the pregnancy. It certainly holds good in the treatment of eclampsia, but must not be adhered to too closely in the face of a progressive toxemia when this condition depends wholly or in part on the pregnancy itself.

There is a disturbed water metabolism in these cases, probably owing to a pituitary dysfunction. For this reason the scales are more important in the early diagnosis of impending toxemia than the blood pressure or urinalysis.

In addition to treatment by restoration of fluid balance, rest and sedatives, as mentioned by Dr. Norris, I should add the value of a diet fairly high in protein with a restriction of carbohydrates in the early cases to prevent the development of a hypoproteinemia. Restriction of salt is important, but in addition the soda or alkalis the patient may be taking for heart burn should not be overlooked. It is the restriction of the sodium ion that is essential.

In the obstetric service at the Orange General Hospital one hardly ever sees a patient with eclampsia who cannot be brought out of convulsions by proper dehydration and kept sufficiently dehydrated to prevent recurrence. I think spinal drainage is a valuable procedure in severe eclampsia. It is common to have a patient in deep coma wake up and talk before the drainage is completed. With the patient out of convulsions I feel that there is ample time to decide upon the most conservative manner in which to induce labor and deliver her.

Before closing I wish to ask Dr. Norris to name the indications for doing a podalic version on his patient since he gives a favorable picture of her condition during the twenty-four hours after the membranes had been artificially ruptured and immediately preceding the operation. I make this request simply because I well know his tendency toward conservatism, and I think he can present his indications in a better manner than his report of the case shows. I think even a cesarean section under local anesthesia can be a conservative measure in the occasional case of a primipara with a fulminating toxemia before the development of convulsions when she is not at term and when the condition of the cervix and lower uterine segment are not favorable for the induction of labor.

I think his case well illustrates what may be accomplished by vigorous treatment and I congratulate him upon his splendid achievement in saving this patient's life.

DR. A. F. CARAWAY, Jacksonville: I think the members should all thank Dr. Hoffman for this excellent presentation of a problem with which we are all faced at present. We have seen the handwriting on the wall as to what we are going to do with the indigent and semi-indigent group.

In Jacksonville we have been lucky enough to have hospital facilities available for this group, and we have cooperative city and county health organizations to take care of these indigent and semi-indigent patients. We also have clinics for them. The case of the semi-indigent patient is taken from the physician and turned over as a case solely for the clinic or the hospital.

Dr. Hoffman has brought us an excellent solution for handling these patients in the future. The small communities without hospital facilities need some method of supervision. That has been a problem for a long time. The maternity home, properly supervised, as outlined by Dr. Hoffman, is an ideal arrangement. I think we could

all profit by and should begin to make plans for such establishments throughout the state.

DR. DONALD M. BALDWIN, Jacksonville: To insure the proper management of labor in abnormal presentations, it is essential that the obstetrician thoroughly know his patient in advance and exhaust all the means at his command to become cognizant of any abnormality, regardless of how slight, especially in regard to the pelvic architecture, the pelvic organs and the contents of the pregnant uterus. There is no phase of medicine in which the saying "forewarned is forearmed" is more applicable than in successfully dealing with this difficult group of conditions.

Abdominal palpation and accurate pelvic mensuration are two of the most important means by which obstetricians are able to recognize early, abnormal positions of the infant and to judge the patient's ability to cope with the situation as far as the bony pelvis is concerned. We have all been taught the four maneuvers of Leopold and the importance of pelvic measurements and general contour of the bony pelvis, but these routine procedures are not spectacular and are thus too often sadly neglected.

In the conduct of labor, we have all been warned to "make haste slowly" and all text books advise us to give nature a chance before resorting to radical procedures. These are all words of great wisdom, provided we know exactly the problem we are dealing with and have a fairly good idea what to expect. In abnormal presentations, early recognition is imperative together with early correction, if indicated. We should never wait until the baby is dead or dying and the mother in a precarious condition before we decide all is not well and something should be done about it.

Dr. Nelson has very ably discussed the cause and management of many abnormal presentations. In almost every condition we find that pelvic contraction plays an important etiologic role. Faulty varieties of position in cephalic presentations have in the past been considered mere accidents of rotation during advancing labor. Thoms, Caldwell and Moloy have shown that different types of pelvis have characteristic modes of engagement of the vertex and mechanisms of labor which correspond, so that it may eventually be possible from a careful study of the pelvis to predict fairly accurately how the child will be born. Deviation from these distinct mechanisms causes dystocia and trouble.

The cases of extreme contracture do not present much of a problem when the condition is recognized; since vaginal delivery is impossible, an elective section is done with minimal danger to mother and child. It is the borderline cases in which a trial of labor is indicated that really test our wisdom and skill in effecting a satisfactory outcome.

It must be remembered that the fetal head in its descent attempts to adapt itself to that diameter of the pelvic inlet most suited for its reception. If arrest occurs and forceps are applied to effect delivery, the head must be made to pass through the diameter most suited for its passage. The same is true for breech extraction. It is essential, therefore, to know the type of pelvis we are dealing with for each patient, especially in abnormal presentations in which version and breech extraction are contemplated.

DR. NORRIS (concluding): Because of attempts to keep the paper within the time limit, I am afraid that I sacrificed clarity for brevity. In answer to Dr. Collins' question as to indications for performing a podalic version, I give the following facts. The patient had been in labor for twenty-four hours, and even though she was not experiencing hard labor, to control the toxemia it was necessary to give sedatives in larger doses than are generally used. The baby began to show signs of asphyxia; it was harder to control the patient's blood pressure; she was in the second stage of labor and was not making proper progress. It was, therefore, decided that it was in the best interests of both the mother and the baby to deliver immediately, and as the head was high and in posterior position, podalic version and extraction seemed

a better procedure than the use of high forceps.

The baby was normal and was in excellent condition both at birth and four weeks postpartum.

I wish again to acknowledge my gratitude for the help rendered by the surgeons, Dr. Jelks and Dr. Slaughter, for I feel that they saved the patient's life. I also wish to thank the discussors for their kindness.



THE MANAGEMENT OF PRIMARY GLAUCOMA

H. J. BLACKMON, M. D.
TAMPA

Primary glaucoma is distinguished from secondary glaucoma in that no disease can be found in the eye as the cause of the increased tension. When the cause for primary glaucoma is established, the approach to treatment certainly can be made in a different light. The number of people who go blind from glaucoma makes this disease a problem for all ophthalmologists. Grable^{1a} stated that bilateral blindness caused by all forms of glaucoma has been estimated at anywhere from 8 to 12 per cent of such blindness and that 90 per cent of that could have been prevented. Thus it is important to be aware of the value of the early diagnosis of glaucoma.

The clinical classification of primary glaucoma is as follows:

- a. Acute congestive or uncompensated glaucoma.
- b. Chronic simple glaucoma, glaucoma simplex, or chronic compensated glaucoma.
- c. Chronic congestive or chronic uncompensated glaucoma.
- d. Absolute glaucoma.

The diagnosis of early glaucoma is not easily made. This disease should be kept in mind in treating all patients over 35 or 40 years of age. Glaucoma simplex, as a rule, begins slowly without the patient realizing its presence. It is, therefore, easy to see how the disease may develop to a considerable degree in one eye before the patient discovers that treatment is required. All ophthalmologists have had cases of this sort. I had 2 cases recently in which the patients had become practically blind in one eye. Their eyes had been refracted several times in the course of a few years. I should like to emphasize that when a patient of the age in which glaucoma

usually occurs has had repeated change of glasses, this disease should always be considered. Especially is this consideration important when the patient complains of difficulty with close work as the accommodation is lost early in glaucoma. Likewise, after careful refraction when no other cause can be found for the persistent distress, glaucoma should be borne in mind. Thus it is natural, since the symptoms and signs in early glaucoma are few, for the patient to attribute symptoms to the glasses. It is essential, therefore, to refract carefully, especially in cases in which the patients are of the age with which glaucoma is associated. No ophthalmologist is too careful in looking for signs of early glaucoma. Since many patients with cataracts have glaucoma also, this fact should be kept in mind. I shall never forget 2 cases in which both diseases were present. One was that of a patient who had been told that when he became blind because of the cataract, the cataract could be removed. He became blind and came in for operation. Then it was discovered that he was totally blind owing to glaucoma. Another patient came to me after having been told that the cataract should be removed from one eye. She had a nuclear cataract in that eye; the fundus could be seen fairly well. The disk was white with deep glaucomatous cupping. The eye was without light perception!

Grable^{1b} observed that headache in the early morning or shortly after being in a dark room is suggestive in a person of the age at which glaucoma commonly occurs. The tonometer is essential in making the early diagnosis of glaucoma. The upper limit of normal tension is usually 25 mm. of mercury (Schiötz). This varies a little in different persons, and, too, the tension is highest in the early morning. This variation, however, is slight in the normal eye, only 2 or 3 mm. of mercury in the course of twenty-four hours. In glaucoma it is increased to 6 or 8 mm. or more. Thus in trying to establish the diagnosis, it is important to take the tension in the early morning when the patient awakes. In fact, it is best to study the tension curve, taking the tension about every four hours from early morning until bedtime. If this procedure is difficult, the Seidel test can be made. It consists in taking the tension before and after the patient has been in a dark room for from one-half to one hour. Checking the tension before and after mydriasis

Read before the Third Annual Meeting of the Florida Society of Ophthalmology and Otolaryngology, Jacksonville, April 28, 1941.

is important in suspicious cases. Of course the best guide to the diagnosis of glaucoma is repeated careful studies of the visual fields.

In the treatment of acute uncompensated glaucoma, time means a great deal. The blockage of the angle of the anterior chamber by the root of the iris must be relieved to permit the aqueous to pass through the canal of Schlemm. If the acute manifestations have been present for two or three days when the patient is first seen, one cannot afford to lose time with medical treatment. It is better to relieve the tension medically, if possible. In order to lessen the probability of hemorrhage, it is generally agreed that the tension should be lowered before operation.

The patient should be placed in bed at the hospital. Morphine sulfate should be administered hypodermically as necessary. A saline cathartic should be given, also calcium gluconate grains 15 three times a day and a 5 per cent solution of dionin twice daily. Every two hours heat should be applied for half an hour. As a miotic, eserine salicylate or sulfate is the preferable drug; a 1 per cent solution should be administered every ten or fifteen minutes for about two hours, then every hour or two for the first day. The intake of fluids should be restricted. A 10 per cent solution of sodium chloride, 100 cc. given intravenously daily, is beneficial. Gifford^{2a} recommended from 250 to 500 cc. of a 25 per cent solution of dextrose, administered intravenously. Bellows, Puntenney and Cowen³ reported good results with sorbitol in lowering the tension; 100 cc. of a 50 per cent solution was given intravenously and repeated in twenty-four hours, if necessary. Dyar and Matthew⁴ reported great reduction of tension in all types of glaucoma with tension over 40 mm. of mercury (Schiotz), prior to operative procedure, by intravenous injection of a 25 per cent solution of sucrose. Personally, I use a 10 per cent solution of sodium chloride and believe it helps in lowering the tension.

The operation of choice is a wide basal iridectomy, which should not be delayed over two or possibly three days. Wiener⁵ stated that if the anterior chamber is too shallow to make a proper incision, a posterior sclerotomy reduces the tension and deepens the anterior chamber. Fromaget, cited by Gradle,^{1c} in 1922 noted the disappearance of symptoms of glaucoma after the retrobulbar injection of novocain and adrenalin.

Friedenwald⁶ demonstrated that sudden reduction of intraocular tension, as in operations in which the anterior chamber is emptied, results in congestion of the ciliary body similar to that found in acute glaucoma. In glaucoma, it is likely to be greater. He favored treatment by the retrobulbar injection of from 0.2 to 0.3 cc. of a 1:1,000 solution of adrenalin with 1 cc. of a 1 per cent solution of novocain. The tension is reduced, anesthesia is greater and the hemorrhage is less. I have found this a helpful procedure.

In the treatment of glaucoma simplex, I agree with the majority of ophthalmologists that medical treatment should be given a fair trial to determine if the tension can be kept within normal limits and whether or not the fields are lost. If by medical treatment tension remains normal and there is no loss in the visual fields, what more can one ask? There is another angle, however, that has to be considered. Will the patient cooperate in the treatment over a long period of time?

After the diagnosis has been made, it is my policy to have a talk with the patient and explain the disease and the importance of his full cooperation in the treatment. It does not take long to size up the patient as to his willingness to cooperate. This estimate may make a difference in the type of treatment.

It is understood that before beginning treatment a thorough examination of the eyes has been made. This includes a study of the tension, visual acuity, visual fields and depth of the anterior chamber together with the appearance of the angle, media and fundi. A general physical examination should also be made. After medical treatment has been started, a thorough check should be made at definite intervals to note the progress of the disease. Studies of the tension, examinations of the fundus and a thorough check of the visual fields should be made. The fields give the most valuable indication as to the status of the disease.

Pilocarpine and eserine are the two most important drugs used in the treatment of glaucoma. According to Berens⁷ they contract the pupil by increasing parasympathetic activity in the sphincter of the pupil. In this way the base of the iris is prevented from blocking the canal of Schlemm.

Pilocarpine hydrochloride or nitrate is usually used in the strength of from $\frac{1}{2}$ to 2 per cent although some use as high as 5 per cent. I

prefer pilocarpine nitrate and seldom use more than a 2 per cent solution. The weakest solution that holds the tension within normal limits and how often to instill it should be determined by studies of the tension. Gradle^{1a} observed that as much damage can be done to an eye by using too strong a miotic and at too frequent intervals as by using no miotic. Pilocarpine is not as potent as eserine, but routinely it is the preferable drug. It is not as likely to cause dermatitis and conjunctivitis as is eserine. The solution should be kept sterile, and fresh solution should be obtained every two or three weeks. The frequency of use of the miotic is determined by checking the time the drug maintains lowered tension. As the tension is highest in the early morning, it is necessary that the drug be instilled at that time. It is important to use the drug just before retiring, and since the effect of ointments or jellies lasts longer than that of solutions, they may be used then.

Eserine salicylate or sulfate is a more powerful miotic than pilocarpine. It is used in the strength of $\frac{1}{4}$ to 1 per cent solution. Eserine is to be used in the treatment of acute glaucoma and not in glaucoma simplex as its prolonged use is injurious to the eye. It is generally agreed that if eserine is necessary to keep the tension down, the condition becomes surgical.

Epinephrine and its derivatives are beneficial in the treatment of chronic glaucoma. Gifford^{2b} stated:

Epinephrine causes dilatation of the pupil by stimulation of the sympathetic nerve endings but also produces marked vasoconstriction of the vascular bed. This effect, in conjunction with the active hyperemia that ensues, results in lowering the intraocular tension. This is the case only in eyes with a relatively normal vascular system and hence is of value chiefly in chronic glaucoma.

Occasionally epinephrine causes a rise in the tension. Treatment with eserine or pilocarpine is advisable prior to the use of epinephrine to prevent mydriasis. It is wise to study the effect of the weaker solutions of epinephrine before using the stronger solutions. The method of Gradle^{1d} is convenient and effective for using epinephrine. A cotton wick with from 4 to 6 minims of 1:1,000 solution of epinephrine hydrochloride is placed in the upper cul-de-sac after anesthesia and left for three or four minutes. Solution, ointment or jelly of epinephrine bitartrate may be used. As stated by Wiener and Alvis,⁸ epinephrine bitartrate in jelly form gives a stable and economical preparation. I have

found this statement of theirs true: "After operation for glaucoma there may be a rise of tension difficult to control. Such a case may respond to epinephrine bitartrate 2% in jelly, once or twice daily."

Barkan and Maisler⁹ reported the use of a 1:100 solution of adrenalin chloride as drops in the conjunctival sac with good results in over 100 cases. This is the same preparation used by inhalation from a glass nebulizer in bronchial asthma. They found it stable with no time limit on its effectiveness; also there were no untoward effects. There may be occasionally an initial rise in tension, they observed, for which reason they confined its administration in the eye to the office under personal supervision. Levoglaucon was developed by Hamburger, described by Post.¹⁰ Post reported cases treated with this mydriatic and concluded that levoglaucon and epinephrine bitartrate are important aids in the nonoperative treatment of chronic simple glaucoma, but of no value in acute glaucoma.

Clarke¹¹ in reporting on mecholyl and prostigmine concluded that they may prove of value in treating acute and subacute glaucoma. I tried mecholyl with eserine in one case of chronic simple glaucoma and one case of chronic uncompensated glaucoma, but did not succeed in lowering the tension in either.

Adrenal cortex has been tried recently. Josephson¹² reported favorable results after the use of adrenal cortex hormone in glaucoma simplex. Woods,¹³ however, had no favorable results in 11 cases. Haseltine¹⁴ claimed a marked decrease in the tension in 5 cases after the addition of suprarenal gland to the treatment. Goldenburg¹⁵ reported good results with spleen extract.

The patient with glaucoma should have a general physical examination, and any systemic disease should receive careful attention. Excessive fatigue should be avoided. Mental upsets and worry are to be guarded against. Schoenberg¹⁶ noted how mental upsets may cause a rise of tension in some patients with glaucoma and how psychodiagnosis may have a therapeutic effect. Coffee and alcohol should be eliminated. Wiener⁵ encouraged patients with glaucoma to do close work as the constant action of the ciliary muscle pumps the aqueous into the canal of Schlemm and thus tends to bring the tension down. In cases of chronic glaucoma when the tension is slightly above normal in miotic patients Gifford^{2b} ob-

served that potassium chloride may be substituted for sodium chloride, with a diet designed to have an acid ash. This is an endeavor to lessen edema. Also, ammonium chloride may be given in doses of 6 Gm. a day to lessen further the alkali reserve.

Next to be considered is the surgical treatment of glaucoma simplex. Gifford^{2a} stated:

More harm is done in glaucoma by delaying surgery than by operations even when improperly done. Whether one chooses corneoscleral trephining, sclerecto-iridectomy according to Lagrange, or iridencleisis will depend on one's training.

To me Elliot's corneoscleral trephining is the operation of choice for this reason and because of the fact that results have been satisfactory. I shall not attempt to give the detailed technic of the operation, but instead shall enumerate a few of the important points as given by Elliot.^{17a,b}

1. Do not extend the conjunctival incision to the limbus as this procedure limits the area available for filtration.

2. The conjunctival flap should be as thick as possible to serve as a protective covering of the opening for filtration.

3. Dissect the conjunctivocorneal flap forward a full millimeter, if possible. The cornea should be split and not cut.

4. Apply the trephine as far forward as possible without injuring the flap.

5. The trephine must be sharp.

6. Avoid all unnecessary interference with the iris. Elliot^{17a,b} thought this the most important point for success after trephining. The iridectomy should be peripheral, and the trephined opening should be free of all iridic tissue.

Cordes¹⁸ considered cyclodialysis the operation of choice in early simple glaucoma when the tension is not above 40 mm. (Schiotz). It can be repeated if necessary and does not interfere with any of the filtering operations. This operation is principally used after other operations fail to lower the tension sufficiently.

Woods and Burch¹⁹ reported in 1937 that originally corneoscleral trephining was used routinely at the Wilmer Clinic in glaucoma simplex. For three years previously they had inclined to the iris inclusion operations, especially in cases of glaucoma with shallow anterior chamber and a history of iridescent vision. They felt that corneoscleral trephining is most useful in cases of simple noncongestive glaucoma in which there is an anterior chamber of normal depth,

which have no history of iridescent vision and in which a thick conjunctival and episcleral flap is obtainable.

Green and Green²⁰ stated that the trephine operation has withstood the test of time better than any other. They considered excessive trauma as the chief cause of failure. They used an automatic trephine and said it has reduced their complications to a small percentage.

Wheeler²¹ preferred corneoscleral trephining for chronic simple glaucoma as he thought "it offers the best chance for permanent reasonable control of the tension, with little operative trauma and only slight postoperative danger." Wiener²² favored corneoscleral trephining in simple glaucoma and was of the opinion that it should be successful in over 90 per cent of the cases. He did not consider the danger of late infection great.

Troncoso²² reported good results in the majority of cases in 12 operations of cyclodialysis with insertion of a metal magnesium implant between the sclera and the ciliary body. The iris and ciliary body were kept separated from the sclera and remained so after absorption of the metal.

The Lagrange operation has been used a great deal. It is another type of filtering operation. Woods and Burch¹⁹ stated that this operation has been superseded by others, especially the trephine and iris inclusion operations.

The medical treatment of chronic uncompensated glaucoma is not very effective. It is similar to that in acute uncompensated glaucoma, but here time does not mean as much as in the acute case. Iridectomy does not give the results in this type of case that it does in the acute cases. Corneoscleral trephining is the operation that I prefer. The Lagrange operation or one of the iris inclusion operations may be performed.

In absolute glaucoma, if the eye is painful, surgery must be resorted to. In 1927 Gradle²³ described an operative procedure in which a tongue of conjunctiva is implanted into the anterior chamber through the scleral incision of a cyclodialysis. Retrobulbar injection of alcohol may be tried. Shannon²³ reported 5 cases of absolute glaucoma before the Section of Ophthalmology of the College of Physicians of Philadelphia in February 1941 in which a retrobulbar injection of 80 per cent alcohol was carried out

successfully. One of the filtering operations may be tried. As a rule enucleation is the necessary operation.

In this paper I have made an effort to avoid too many details and to call to mind many of the cardinal points of interest in the treatment of this common disease with the hope of benefit to all.

BIBLIOGRAPHY

1. Gradle, H. S.: (a) Glaucoma Errors That I Have Made and That I Have Seen, *South. M. J.* 33:498-502 (May) 1940. (b) Concerning Simple Glaucoma, *Am.J. Ophth.* 14:936-943 (Sept.) 1931. (c) Use of Adrenalin in Increased Intraocular Tension, *Am.J.Ophth.* 7:851-854 (Nov.) 1924. (d) Use of Epinephrine in Ocular Hypertension, *J.A.M.A.* 84:675 (Feb. 28) 1925. (e) Conjunctival Drain of Anterior Chamber; Operative Technic Used in Absolute Glaucoma, *J.A.M.A.* 89:2025-2027 (Dec. 10) 1927.
2. Gifford, S.R.: (a) Therapy of Glaucoma, *J.A.M.A.* 103:1537-1539 (Nov. 17) 1934. (b) The Pharmacopeia and the Physician; Use of Drugs in Ophthalmology, *J.A.M.A.* 113:928-931 (Sept. 2) 1939.
3. Bellows, J.; Puntenney, I., and Cowen, J.: Use of Sorbitol in Glaucoma, *Arch. Ophth.* 20:1036-1043 (Dec.) 1938.
4. Dyar, E. W., and Matthew, W. B.: Use of Sucrose Preparatory to Surgical Treatment of Glaucoma; Preliminary Report, *Arch. Ophth.* 18:57-61 (July) 1937.
5. Wiener, M.: Some Remarks on Diagnosis and Treatment of Glaucoma, *Bull. Vancouver M.A.* 16:264-270 (June) 1940.
6. Friedenwald, J. S.: Some Factors Concerned in Success of Operations for Glaucoma, *Am.J.Ophth.* 15:189-193 (Mar.) 1932.
7. Berens, C.: *The Eye and Its Diseases*, Philadelphia: W. B. Saunders Co., 1936, p. 949.
8. Wiener, M., and Alvis, B. Y.: Use of Concentrated Epinephrin Preparations in Glaucoma, Iritis, and Related Conditions; Clinical Study, *Am.J.Ophth.* 20:497-504 (May) 1937.
9. Barkan, O., and Maisler, S.: Adrenalin Chloride 1:100 in Ophthalmology, *Am.J.Ophth.* 20:504-507 (May) 1937.
10. Post, L. T.: Laevo-Glaukosan and Epinephrine Bitartrate in Treatment of Glaucoma, *Arch. Ophth.* 11:187-193 (Jan.) 1934.
11. Clarke, S. T.: Mecholyl and Prostigmine in Treatment of Glaucoma, *Am.J.Ophth.* 22:249-257 (Mar.) 1939.
12. Josephson, E. M.: Effect of Cortin on Intraocular Tension in Glaucoma, *Science* 82:62 (July 19) 1935.
13. Woods, A. C.: Use of Extract of Adrenal Cortex in Glaucoma, *Arch. Ophth.* 14:936-946 (Dec.) 1935.
14. Haseltine, S. L.: Suprarenal Gland in Treatment of Glaucoma, Progressive Myopia, and Some Allergic Conditions, *J. M. Soc. New Jersey* 34:729-731 (Dec.) 1937.
15. Goldenburg, M.: Splenic Extract in Glaucoma (Preliminary Report), *Illinois M.J.* 78:495-500 (Dec.) 1940.
16. Schoenberg, M. J.: Psychosomatic Interrelations; Their Therapeutic Implications in Glaucoma, *Arch. Ophth.* 23:91-103 (Jan.) 1940.
17. (a) Elliot, R. H.: (a) Some After-Thoughts on Trephining for Glaucoma, *Am.J.Ophth.* 14:999-1004 (Oct.) 1931. (b) Trephining, *Arch. Ophth.* 8:797-803 (Dec.) 1932.
18. Cordes, F. C.: Early Simple Glaucoma; Its Diagnosis and Management, *Arch. Ophth.* 17:896-915 (May) 1937.
19. Woods, A. C., and Burch, E. P., Jr.: Surgical Treatment of Glaucoma, *South. M. J.* 30:888-896 (Sept.) 1937.
20. Green, A. S., and Green, M. I.: Automatic Trephine for Glaucoma, *Arch. Ophth.* 21:328-330 (Feb.) 1939.
21. Wheeler, J. M.: Iridectomy with Cyclodialysis for Reduction of Ocular Tension, *Arch. Ophth.* 16:569-577 (Oct.) 1936.
22. Troncoso, M.U.: Cyclodialysis with Insertion of Metal Implant in Treatment of Glaucoma; Preliminary Report, *Arch. Ophth.* 23:270-300 (Feb.) 1940.
23. Shannon, C.E.G.: Personal Communication.

Citizens Bank Bldg.

THE PRACTICING PHYSICIAN'S PLACE IN PUBLIC HEALTH

W. H. PICKETT, M.D.
JACKSONVILLE

The profession of public health was conceived and born of the efforts of private medical practitioners to perform what seemed to them to be their civic duties. There was no specific compulsion, outside of the Hippocratic Oath, which gave physicians their zeal for providing a healthier world. Rather, the training which they had undergone in preparation for their lifework enabled them to see the dangers surrounding mankind far more clearly than their fellowmen could.

The first attempts by medical personnel in the field of public health were directed at control of environment. Sanitation was the most important word of the day, as in the time of Moses, who was probably the first sanitarian. The present highly effective methods for the provision of pure water supplies and of milk and food and for the disposal of waste and refuse, the elimination of nuisances, the control of pests, the purification of the air and the like are the direct culmination of medical efforts in the first era of public health.

With the quickly publicized discoveries of Pasteur, his colleagues and his contemporaries regarding the etiology of the communicable diseases, a new epoch opened. In it the greatest emphasis was placed on the source, diagnosis, modes of transmission and control of contagious infections. The bacteriologist became the dominant figure in public health. Vaccines, therapeutic serums and drugs were developed to control the pathogens. Epidemiologic laws were deduced, and ways to throttle potential pandemics were devised. The state of health of the individual in relation to the masses of population was

State Health Officer.

Read before the Health Officers' Section of the Florida Public Health Association, Jacksonville, April 28, 1941.

studied. Properly gathered vital statistics demonstrated the presence of problems of which no one had dreamed. The complexities of the science of public health were slowly unraveled.

The realization that no single person could be trained in all the technics of the field forced specialization within the profession. The education required to fit a person for health administration, public health laboratory work, epidemiology, sanitary engineering, nursing, maternal and child health and venereal disease control indicates plainly that a third period in public health is upon us. Human beings must now be considered and dealt with as individuals instead of as groups. Health education with attention to all the physical and mental characteristics of each person is today an important part of every public health program and, with the features of the other two eras, rounds out the concept of the scope of the field of public health administration.

As the profession of public health developed, the private practitioner of medicine could not afford to devote the time required for the acquisition of special knowledge to keep up with modern preventive practices. Consequently, the private physician is on the outer edge of the public health circle today. But public health as a branch of medicine is still based upon and will continue to require and depend upon the services of the private physician for maximum results.

No modern practitioner can successfully practice without the active and effective help of his local health unit. The many and varied services furnished by a health department are necessary to the proper understanding of nearly every case of illness. Notice of the prevalence of a certain disease may materially influence a diagnosis. Morbidity statistics, while not yet of value, of course, are available through all health departments. Laboratories are maintained by local state and national governments to furnish physicians with diagnostic services which are not offered in small communities by private persons. Consultative services in specialized medical fields such as the venereal diseases, tuberculosis, dental health, maternal and child health matters, and the common communicable diseases are made available through state and local health departments. These clinics are primarily diagnostic in nature for it is fully realized that public health

is concerned mainly with preventive medicine. When authorities on these subjects reside within a locality, they are encouraged by the health officers to take over the management of such clinics. Since these physicians must take time from their practices to render this service, a fair compensation for their work is provided for in budgets of the local and state health department. If there is no competent specialist available in the medical profession of a community, the health department sees that one is provided from outside, or sends one of the local physicians away for specialized work.

Health officers have the responsibility for the training of the vast majority of private physicians in matters pertaining to public health. Medical schools emphasize certain aspects of community hygiene, but actual practice is the greatest teacher. A health officer must be able to expound the principles of preventive medicine by all the means at his command. Cooperation with the local medical association is, by all odds, the most effective method. With the opportunity to present the fundamentals of the profession in realistic fashion and to thresh out the disagreements in organized meetings nothing but good can result. Actual demonstrations of case-finding, sanitary control, nursing services, morbidity tabulations and immunizing clinics will recapture and solidify the interest of physicians.

A health officer must be tactful, resourceful and enthusiastic. He must be a master of diplomacy so as not to offend the people with whom he comes in contact. He must be resourceful so that if his efforts are blocked in one way, he can accomplish the same results by a change in tactics. He should study the manners and customs of his community and conduct himself accordingly. A health officer in a county where the business houses open at 7 o'clock in the morning obviously should not wait until 9 o'clock to open the health unit. Neither should his dress be too far out of line with the clothes worn by the other physicians or business men of the community. Many a potentially good health officer has lost out because he neglected the feelings and tastes of the persons comprising the community in which he worked. He just did not fit into the community.

A health officer must be enthusiastic, but not so much so that he lacks the patience to devote the time necessary to educate the people to

his point of view. He must be able to imbue his staff with the idea that they are contributing materially to the health and happiness of the people of the community. Perhaps they can best be impressed with the importance of this contribution by frequent staff conferences at which the department personnel are invited to express their opinions freely. The health officer should be a leader who is able to stimulate and guide the thoughts and actions of his staff. The objectives toward which the department is striving should be kept before the staff at all times, and even minor changes in plans should be explained in detail that gives the reasons for the changes.

The physician is the most respected person in any community. Working through him the health department can accomplish ends attained in no other way. His advice and good will can smoothe the path of any health program. If supplied with most recent information, in a form readily assimilable, the physician can contribute very greatly to the campaign for health education. The patient seeks advice on all personal matters from his family physician. It is the business of the public health official to see that the physician recognizes the aims of public health and presents them in the proper light.

The Health Commissioner of Detroit, Dr. Henry Vaughan, has secured the cooperation of the rank and file of 1,100 members of the medical profession in that city in a novel, although financially expensive, manner. It is his belief that the office of every family physician should be a center for preventive medicine. Accordingly, he has spent much time in obtaining the aid of the private practitioner. A standard fee for the administration of prophylactic immunizations has been set up. If the patient cannot pay the physician for this service, the city pays. The cases of communicable disease which require treatment to prevent the infection of other members of a family or of the public are handled in the same way. This method is rather expensive, but it promotes the best cooperation obtainable. The physician is inoculated with the seeds of public health, the health department finds cases and renders them noninfectious, and the public is protected to the best of everyone's ability. The physicians are a vital part of his splendid health program.

A health unit cannot exist without the best wishes and assistance of the private practitioners.

It is impossible to collect standardized statistics of morbidity and mortality in any way other than through them. Nor can a unit staff the clinics or health demonstrations solely with its own personnel. A just and equitable apportionment of the fields of preventive and curative medicine to health departments and private practitioners respectively is the ideal division of labor. When the fields overlap, consideration for and cooperation with each other keeps the relationship of the private practitioner and the health officer smooth and productive of the best health program possible. Obviously, such a procedure will react to their mutual benefit and to the benefit of the subject of their joint work, the public.

Box 210.



LABOR AND THE INDUSTRIAL SURGEON LELAND F. CARLTON, M.D. TAMPA

The industrial surgeon has a harder task than the physician in any other branch of medicine. He is the go-between for the patient, labor union, industry and the insurer. His whole aim is to get the patient back to work with the least amount of time lost and with the least amount of disability, both temporary and permanent, and to insure the greatest amount of comfort to the patient during convalescence.

The man away from work lessens his income, reduces the efficiency of industry, increases insurance rates and proves a loss to all concerned. At this moment, when industry needs labor and when the laborer needs work, the question naturally arises as to the cooperation of all concerned. There should be a clearer understanding between labor, industry and the physician. Labor is interested in higher wages; industry is interested in a reasonable profit in its business, with greater efficiency. The physician is interested in the welfare of the worker who comes under his supervision.

Selective service examination has shown that of the average American citizens, 40 per cent have been rejected as unfit. What does this unfitness mean to industry? What does it mean to the breadwinner of the family? This per-

President's Address, delivered before the Twenty-Second Annual Meeting of the Florida Railway Surgeons' Association, Jacksonville, April 28, 1941.

centage of loss must be borne some place. Industry with its physical requirements wants physically fit employees the same as the government does. What is going to become of the 40 per cent who are unable to cope with the other 60 per cent? Who must bear the burden? The government turns this group down. Industry does not want a man who is not proficient mentally as well as physically.

There will have to be a readjustment. The government must be more lenient in order to reduce the tax roll. Industry must make classifications to take care of the person who is unable to take care of himself. Men with hernia work every day, but industry no longer wants a man with a hernia. Men with pronated feet are capable of doing manual labor within the limitations imposed by this deformity, but the government does not want them. Men with poor eyesight are capable of performing certain work, but the government will not accept them. Men with hypertension are capable of performing certain work. Men with cardiac lesions often live and work for years without interference. All these classes are here. They must be fed and clothed. It is necessary that all live and let live. What is the solution? Whose duty is it to find the solution?

All industry, whether it be of railroad, ship-building, the Army, or what have you, is striving for efficiency, but is overlooking the man who is dependent on industry for his maintenance and who is so unfortunate as to be in the class of the physically unfit. There should be a place for every man willing to do his bit. Supervision would reduce the government's load, it would reduce the task of the W. P. A., and it would tend to make a better country in which to live.

I believe a man should be classified according to his fitness and allowed to work accordingly. The industrial surgeon, who is acquainted with the requirements of industry, is more capable of performing this task than any other, but for this undertaking he must have cooperation and a better understanding.

The solution of the problem lies in a three-fold objective. Preemployment examination is the first essential. It includes classifying each person as to his power to perform work and allowing the applicant not 100 per cent physically fit to sign a waiver for his present disability, but it permits him to work. Secondly, periodic health examinations, with an attempt not only

to preserve, but to improve the health of the workers constitute the second requirement. Here, education as to health and sanitation may be taught, thereby enabling the laborer to take home to his family what he has learned and gained by such teaching. Lastly, a clearer understanding between employee, employer, labor unions, insurers and the industrial surgeon is necessary.

805 Citizens Bank Bldg.

COORDINATING THE SCHOOL AND HEALTH PROGRAM

A. L. STEBBINS, M. D.
PENSACOLA

The program of a county health department in the schools has changed during the last few years and has become more or less a controversial subject. Among health officers there seem to be two opinions as to the program that should be carried on in the schools. One group feels that the pupils of anywhere from three to five or six or more grades should be examined each year. The other group believes that little is accomplished by examining pupils in the schools and that the examination of children should begin in infancy and be carried on through the preschool period. In this way the child would be as free as possible of defects when he enters school. This latter group is interested in special examinations of the child of school age, such as tests made by the audiometer.

Since my experience has been confined to Escambia County during the last three years, I shall limit my paper to observations regarding the work of this county. During this period the health officials have conducted the usual physical inspections of the pupils of the first, third and fifth grades in the white schools. We have also examined pupils in a few of the first grades in the colored schools. On one occasion we made an inspection of the two junior high schools in Pensacola at the request of the school authorities. The inspections were initiated by the health department. The usual summer round-up program sponsored by the Parent-Teachers Association has been conducted each year. The physical inspection consists of a brief examination of the child, following the outline on the school

Director, Escambia County Health Unit.
Read before the Health Officers' Section of the Florida Public Health Association, Jacksonville, Apr. 28, 1941.

record form furnished by the State Board of Health. We have stressed attention to nutrition, eyes, teeth and tonsils.

In determining the nutrition of a child we cannot hold to a hard and fast rule of height and weight relation. Each child must be treated as an individual with the physique judged by the covering of the chest wall, the development of the long bones and the prominence of the abdomen.

The eyes receive special attention. There is a physical inspection by the physician followed by the Snellen test conducted by the teacher or the nurse. A more accurate and less time-consuming test is made with the Betts telebinocular. Our experience with this machine has been brief, but we are greatly impressed with its possibilities.

The teeth are inspected for caries. All pupils are referred to their dentist, and those financially unable to visit a dentist are treated by the dentist in charge of the dento-mobile.

The tonsils are inspected, and their condition is noted. When possible, we attempt to obtain the child's history relative to frequent colds, repeated sore throat, enlarged cervical glands and other indications of diseased tonsils before advising that the tonsils be removed.

After these three years of inspection of the pupils of the first, third and fifth grades, we have decided that while the examination of those in the first grades seems to benefit the children to a certain extent, there is not much benefit derived either by the children or the health department from the inspection of the students in the third and fifth grades. It happens that children of the first grade in certain income classes have not had the benefit of a health examination. The defects found in these children are brought to the attention of the parents for the first time and make an impression. The usual result is a decided attempt to have the necessary correction made. Parents who make no effort to have the defects corrected at this time fall into two groups, namely, the irresponsible and the extremely poor. Consequently, the children of these groups usually show the same defects in the third and fifth grades, and the same lack of parental cooperation is encountered.

The staff attempts to complete the physical examinations during the first part of the school year so as to give the nurses and interested lay

workers the remainder of the year for follow-up work in obtaining corrections. The nurses in their routine visiting note their records of children with defects, taking advantage of this opportunity of educating the parents to the need of correction. When a nurse finds a child needing some correction in a family of unusually low income, an appeal is made to some lay organization. A public health nurse engaged in a generalized public health nursing service can do a much more effective piece of school nursing than the nurse doing only school nursing, for the problems of the whole family directly concern and act upon the well-being of the school child.

As stated previously the examination is brief and intended to uncover only the gross defects, not minor ones. Even so, it is a possible waste of time to carry on these physical inspections, especially of the pupils in the third and fifth grades. It is felt, however, that this work affords the health officer a valuable opportunity to become acquainted with the personnel of the school system. I believe it is especially valuable in selling the department to the community when the health unit is newly formed. Whether it is of value in a community in which the health department is already permanently installed is a question. Nevertheless it is my opinion that the examination of the children in the first grade, and possibly the second grade, is of great value. My associates and I feel that special tests, such as are made with the audiometer and the Betts telebinocular, are of great value in examining students in all grades of the school.

During this three year period we have continued to attempt the education of the public as to the value of examinations for the infant and child of preschool age. At last we are beginning to see the effects of this program. In this manner we are attempting to decrease the amount of work actually done in the schools. Here again we feel that the best work is accomplished with the infant and child of preschool age. The health department conducts conferences for well babies each week, but as yet it has not been possible to accommodate children above 2 years of age. Thus a period is left between the ages of 2 and 5 in the child's life during which he receives no attention from the health department.

We are planning our health program so as to take care of this "forgotten period." The summer round-ups, sponsored by the Parent-Teach-

ers Association, give us an opportunity to see the child before he enters school, and in this way we secure a large percentage of corrections. These conferences continue to have a better attendance each year.

One of the health department's first responsibilities should be the school environment. So much attention is now paid to personal health in our public health programs that we are prone to forget that the basis of all public health activities rests upon environment, sanitation and many school facilities, such as lighting and water supply. Sanitary facilities could certainly be much improved.

In Escambia County, during our visits to the schools, we have seen many instances of poor sanitation. Several of the schools had inadequate lighting, and in one case there were not enough windows in several of the school rooms. This lack was corrected by the addition of more windows. In another case in which the lighting was poor and windows could not be added, a lighting engineer was called in, and adequate lighting was installed. In other instances lunch rooms were poorly equipped. All of these conditions were corrected through the cooperation of the school board.

One must not forget that, in most instances, the health department is only in the schools as a result of an invitation from the authorities. The principal is the administrator and as such, is responsible for all that goes on in his particular school. The physician or nurse may recommend that a child be excluded because of a communicable disease, but the principal is the only one who has the actual authority to carry out the exclusion orders. The principal and his staff should be consulted concerning the whole health program in the school. More responsibility for the health program should be placed on the

teaching staff, in the form of vision testing, weighing and measuring, and incorporating health education in the everyday curriculum. Health teaching should not consist of a talk or examination at long intervals when the physician or nurse visits the school; it should be a natural integral part of the child's education. The teachers, therefore, should be assisted or taught certain essential procedures, such as first aid, and supplied with literature on health or advised where it may be obtained.

If more responsibility for the whole health program were put upon the school board, where it properly belongs, then the members would probably be more interested in such a program and, what is more essential, would be willing to contribute to it. If a school board is educated as to health matters, the members see that it is to their advantage to spend a little more on health when it is shown in dollars and cents how much it costs each year for a repeater.

Of course, we have carried on the routine immunization for smallpox and diphtheria. Typhoid immunizations are conducted in each school approximately every three years. For all children of the first grade an examination of the stool is made and for any other child when there seems to be an indication for it.

Our aim for the future benefit of the child in Escambia County is the building up of an efficient program of examinations of the infant and child of preschool age. This program is to be developed to such an extent that the child entering school for the first time will have few defects. Thus more time can be devoted to special tests for the child of school age. Each health officer in planning the health program for the schools must be guided by the individual needs of his community.

State Board of Health Bldg.

MEDICAL WRITING SERVICE

Assists the Medical Author in the Preparation of Scientific Papers

Manuscripts edited
Literature reviewed
References completed

Manuscripts typed for publication
Medicolegal subjects summarized
Public addresses prepared

EDITH B. HILL
Consultant
Terms Reasonable

935 SOUTH OREGON AVENUE
TAMPA, FLORIDA
Telephone H 27-454

FLORIDA MEDICAL ASSOCIATION

OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., PRESIDENT.....Miami
GILBERT S. OSINCUP, M.D., PRESIDENT-ELECT.....Orlando
LUTHER W. HOLLOWAY, M.D., 1ST VICE-PRES.....Jacksonville
FREDERICK K. HERPEL, M.D., 2ND VICE-PRES. *W. Palm Beach*
WALTER C. PAYNE, M.D., 3RD VICE-PRES.....Pensacola
SHALER RICHARDSON, M.D., SEC'Y-TREAS.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., CHAIRMAN, "C," '44 Jacksonville
J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43.....West Palm Beach
WALTER C. PAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D. (EX-OFFICIO).....Miami
SHALER RICHARDSON, M.D. (EX-OFFICIO).....Jacksonville
STEWART G. THOMPSON, D.P.H. (ADVISORY).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., CHAIRMAN, "C," '43.....St. Augustine
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
HOMER L. PEARSON, M.D., "F," '44.....Miami
JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H.D. VAN SCHAIK, M.D., CHAIRMAN, "C," '43 Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MC CONNELL, M.D., "D," '42.....St. Petersburg
BRICEY M. RHODES, M.D., "A," '42.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., CHAIRMAN, "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. PERGUSON, M.D., "B," '43.....Ocala
J. N. MC LANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Lakeland

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., CHAIRMAN, "C," '42 Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., CHAIRMAN, "F," '42.....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., CHAIRMAN, "C," '42 Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43 West Palm Beach
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., CHAIRMAN, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R.W.S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., CHAIRMAN, "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '44.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., CHAIRMAN, "C," '42 Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., CHAIRMAN, "F," '44 Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., CHAIRMAN, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. MC EWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYSENBUG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., CHAIRMAN, "E," '44.....Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., CHM., "F," '42.....W. P. Beach
LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARDLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., CHAIRMAN, "F," '44.....Coral Gables
THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
EUGENE G. PEEK, M.D., "B," '42.....Ocala
COUNCIL C. RUPOLPH, M.D., "D," '42.....St. Petersburg
WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., CHAIRMAN, "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

TWELFTH—W. DUNCAN OWENS, M.D., CHM., '43 Miami Bch.
FIRST—WILLIAM C. ROBERTS, M.D., '42.....Panama City
SECOND—C. D. WHITAKER, M.D., '43.....Marianna
THIRD—J. M. PRICE, M.D., '43.....Live Oak
FOURTH—ALVA T. COBB, M.D., '42.....Gainesville
FIFTH—LUCIEN Y. DYRENFORTH, M.D., '43.....Jacksonville
SIXTH—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
SEVENTH—JOHN R. BOLING, M.D., '43.....Tampa
EIGHTH—HOWARD V. WEEMS, M.D., '42.....Sebring
NINTH—CARL D. HOFFMANN, M.D., '42.....Orlando
TENTH—E. B. HARDEE, M.D., '43.....Vero Beach
ELEVENTH—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., CHAIRMAN, "A," '43.....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFROE DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., CHAIRMAN.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. PAULLIN, M.D., (A.M.A. EX-OFFICIO).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., DELEGATE.....Jacksonville
HERBERT L. BRYANS, M.D., ALTERNATE.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., DELEGATE.....Orlando
GEORGE M. DAWSON, M.D., ALTERNATE.....West Palm Beach
(Terms expire Dec. 31, 1943)

Committees—Continued on next page

COMMITTEES—Continued**BOARD OF PAST PRESIDENTS**

WILLIAM E. ROSS, M.D., CHAIRMAN, 1919....	Jacksonville
W. HENRY SPIERS, M.D., SECRETARY, 1938.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902....	Pensacola
HENRY E. PALMER, M.D., 1909.....	Tallahassee
ROBERT H. MC GINNIS, M.D., 1915.....	Jacksonville
FREDERICK J. WALTER, M.D., 1918.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923.....	Jacksonville
JOHN C. VINSON, M.D., 1924.....	Tampa
JOHN S. MCEWAN, M.D., 1925.....	Orlando
H. MASON SMITH, M.D., 1926.....	Tampa
JOHN A. SIMMONS, M.D., 1927.....	Arcadia
FREDERICK J. WAAS, M.D., 1928.....	Jacksonville
HENRY C. DOZIER, M.D., 1929.....	Ocala
JULIUS C. DAVIS, M.D., 1930.....	Quincy
GERRY R. HOLDEN, M.D., 1932.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....	Tampa
HOMER L. PEARSON, M.D., 1934.....	Miami
HERBERT L. BRYANS, M.D., 1935.....	Pensacola
ORION O. FEASTER, M.D., 1936.....	St. Petersburg
EDWARD JELKS, M.D., 1937.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....	Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....	Century

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association, Box 1018

Jacksonville, Fla.

Telephone 5-0577

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.....	Orlando
FRANK C. METZGER, M.D.....	Tampa
HOMER L. PEARSON, M.D.....	Miami
J. H. POUND, M.D.....	Tallahassee
W. MC L. SHAW, M.D.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., CHAIRMAN.....	Miami
SHALER RICHARDSON, M.D.....	Jacksonville
HERMAN WATSON, M.D.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., CHAIRMAN.....	Jacksonville
THEODORE F. HAHN, M.D.....	Deland
COUNCIL C. RUDOLPH, M.D.....	St. Petersburg

DISTRICT MEETINGS—SECOND SERIES

The last three annual medical district meetings arranged by the Council will be held on consecutive days, as were the first three. The first meeting will be in Hollywood on Thursday, October 30; the second in Bartow, Friday, October 31, and the third in Orlando, Saturday, November 1.

Every member is urged to attend his annual district meeting, though he is not limited to attendance at that one meeting as all district meetings are open to every member of the State Asso-

ciation. It is hoped that these meetings will be well attended, and that the members will avail themselves of the opportunity to enjoy the scientific programs and the entertainment offered by the Council and the host societies. Special entertainment has been arranged for the wives of the doctors, and an official meeting of the Woman's Auxiliary will be held in conjunction with each district meeting.

Each district meeting brings to our membership a splendid opportunity for getting better acquainted with out-of-town members, as well as with the officers of the Association and the chairman of the Council, who, at considerable sacrifice, attend them all. The district meeting is the place in which to thresh out local problems for which there is no time at a state-wide gathering such as the annual convention. If there is a problem you wish discussed, bring it up at the business session of your district meeting or talk it over with the officers of the Association who will be present.

MEETING OF SOUTHERN MEDICAL ASSOCIATION

The thirty-fifth annual meeting of the Southern Medical Association, to be held in St. Louis from November 10 through November 13, promises to be one of the most outstanding in the history of the organization. Strong scientific programs have been arranged for the eleven general clinical sessions and the nineteen sections of the Association and, regardless of his particular line of work, each physician who attends will find much to challenge his interest.

A hobby exhibit, similar to the one inaugurated at the Louisville meeting last year, will be held. Any one interested in displaying paintings, pen and pencil sketches, sculpture, photography, and stamp, coin or other collections should apply to the Association's office in Birmingham.

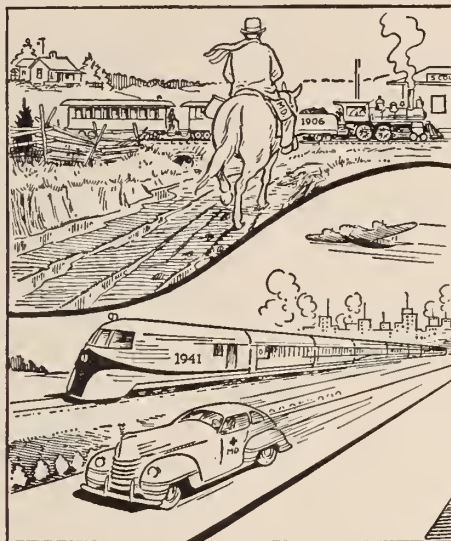
The convention city is well qualified to handle a group as large as the one expected at this meeting. Many large hotels are located within walking distance of the Municipal Auditorium where the scientific activities will be held; others are within ten to twenty minutes' driving distance. While all rooms at the Jefferson, convention headquarters, have already been reserved, space is available at other good down-town hotels. Physicians who plan to attend the convention are urged to make reservations without delay.

Specific information regarding hotel facilities may be secured from Dr. J. Hoy Sanford, Chairman of the Hotel Committee, 910 Syndicate Trust Building, St. Louis.

All members of the Florida Medical Association are cordially invited to attend this meeting.

PAUL V. McNUTT BECOMES DIRECTOR OF HEALTH, WELFARE AND RELATED ACTIVITIES

Under the heading of Medical Preparedness in the September 13 issue of the Journal of the American Medical Association appears an executive order signed by the President of the United States, by which Mr. Paul V. McNutt, who has been coordinator for Health, Welfare and Allied Activities, is made director of a similar agency now established in the Office of Emergency Management. This change is important from the point of view of organization and coordination of the work undertaken. Careful reading of the executive order indicates that an attempt will be made to secure coordination of medical affairs, including both governmental and private agencies. The director is authorized, moreover, to appoint representatives of various private agencies on the committees which will take the responsibility for study and advice on various problems concerned with the national defense. Incidentally, the Health and Medical Committee (of which Dr. Irvin Abell is chairman) is continued as a part of the office of the director; however, the director of the Division of Medical Sciences of the National Research Council, Dr. Lewis H. Weed, is replaced by the chairman of the Committee on Medical Research and Development, Dr. A. Newton Richards. Members of the agency which Mr. McNutt will direct, it will be observed, work entirely without compensation in addition to any other positions they may hold, but funds are provided for maintenance and necessary expenses incidental to the conduct of the work. No doubt the new arrangement moves a step further, at least so far as relates to the national emergency, in coordinating all the medical aspects of medicine and health of the government except those of the Army and Navy, under a single directing hand.



IN STEP WITH PROGRESS FOR THIRTY-FIVE YEARS

SINCE the Southern Medical Association was founded back in 1906, thirty-five years ago, there has been no deviation from that one objective laid down by the founders, the objective which distinguishes the Southern Medical Association from other professional groups—the exclusive purpose to develop and foster scientific medicine and surgery in the South.

SUCH a singleness of purpose and devotion to an ideal accounts largely for a history of unusually successful annual meetings, each better than the last. Logically, the past is a basis for predicting another top meeting at St. Louis, November 10-13.

REGARDLESS of any physician's medical interest, there will be much to challenge this interest at St. Louis. Eleven general clinical sessions, nineteen sections, three independent organizations meeting conjointly, and outstanding scientific and technical exhibits, will be available—still in step with progress.

ALL members of state and county medical societies in the South are cordially invited to attend. And all members of state and county medical societies in the South can be and should be members of the Southern Medical Association. The annual dues of \$4.00 include the Southern Medical Journal, a fine publication recognized as a valuable instrument to physicians of the South in the pursuit of their professional careers.

SOUTHERN MEDICAL ASSOCIATION
Empire Building
BIRMINGHAM, ALABAMA

VIOLATIONS OF MEDICAL PRACTICE ACT

We have been informed that:

C. A. Darby, Opp, Ala., was convicted in Florida and fined \$200.00 and costs for practicing medicine without a license. Reported September 12, 1941 by M. H. Doss, State Board of Health.

Walter Owens of Olive, Fla., was fined \$25.00 for practicing medicine without a license. Reported August 28, 1941 by M. H. Doss, State Board of Health.

Winifred W. Courier, charged with state medical criminal abortion, pleaded guilty and was sentenced to serve a term of five years at the state penitentiary, Raiford. Reported September 24, 1941 by M. H. Doss, State Board of Health.

NEW FLOORING REDUCES RISKS OF
FOOT INFECTION

By supplementing properly maintained footbaths in gymnasiums with a recently introduced cement floor surfacing material on the floors of swimming pool runways, locker rooms and shower rooms, the danger of contracting floor-transmitted infections of the feet can be reduced to a minimum, W. L. Mallman, Ph.D., East Lansing, Mich., reported in *The Journal of the American Medical Association* for September 6.

The new surfacing material contains cupric oxychloride and is called "hubbellite." It is claimed that this flooring when wet releases a minute amount of a copper compound which exerts a powerful action on bacteria in the water film on the floor surface. Dr. Mallman's report presents the results of a study relating to the possibilities as well as the limitations of such a floor covering as an aid in reducing the hazards of floor-borne infections. The author said:

Epidermophytosis and plantar warts are diseases that are transmitted primarily through contact of bare feet and contaminated floors. Thus floor sanitation is a problem in locker rooms, shower rooms and runways of swimming pools.

The commonly accepted procedure of control consists of placing footbaths containing antiseptic solutions in doorways to the swimming pool or shower rooms. By this means the feet are at least momentarily immersed in an antiseptic bath which undoubtedly removes organisms from the feet and also destroys many of them. When the footbath is the sole means of prophylaxis, the bather returns to his locker on contaminated floors and may re-infect his feet before dressing.

Realizing that reinfection may result from contaminated floors, many establishments as a routine wash all floors carefully and follow this with disinfection. Owing to the frequently continuous use of the locker rooms, showers and swimming pools, the cleaning and disinfection of the floor must be done at the end of the

day's use. By this procedure floors become increasingly more contaminated during the day. Cleaning and disinfection function merely as a means of removing each day's increment of pollution; although they may lessen the extent of the contamination, they do not entirely eliminate the danger of floor transmission. . . .

The author stated that the fact that floors properly cleaned each night may carry large numbers of bacteria was demonstrated in a study made of twelve samples of bacteria removed from the surface of a 4 inch square of a painted cement floor in a hallway between the showers and the locker rooms in a college gymnasium on different days. He added:

The bacterial population ranged from a minimum of 1,480,000 to a maximum of 7,490,000, with an average of 4,167,000 bacteria.

The number of bacteria thus demonstrated on an apparently clean floor shows the inadequacy of terminal disinfection of floor surfaces as a means of foot-infection prophylaxis.

There is plainly a need of a method of concurrent disinfection of the floor so that during use the floor surfaces exhibit an antiseptic or disinfectant action.

The author's study of hubbellite revealed among other things that it does exhibit a powerful action on bacteria. One study revealed that, although no inhibitory action was evidenced in one hour's exposure, after two hours a distinct diminution in numbers occurred.

After five hours of exposure the reductions in numbers varied from 40 per cent for one type of organism to as high as 91 per cent for another.

The tests showed definitely that fragments of hubbellite gradually liberate sufficient copper ions to effect the destruction of bacteria, yeasts and molds when fragments of the material are submerged in liquids such as water or nutrient broth.

In another test market milk was smeared on glass, concrete and hubbellite tiles. Whereas on the hubbellite tiles there was an extensive reduction in bacterial count, the count on the concrete tile had very materially increased. Regarding this Dr. Mallman said:

These data would indicate that floors made of hubbellite in dairies and kitchens would prevent the development of bacteria, whereas concrete floors would allow bacterial growth.

A comparative test in a college gymnasium with an ordinary concrete floor showed that the bacterial count was always lower on the hubbellite floor and that the mold counts on the latter were extremely low whereas on the concrete floor they were comparatively high. All samples were obtained in the afternoons when the floors were bearing heavy traffic and all effect of the previous night's cleaning had disappeared. According to the author:

These data do not prove that the use of hubblelite floors would entirely eliminate epidermophytosis or other infections of the foot which may be transmitted by contaminated floors, but they do demonstrate that the amount of contamination can be materially lessened on the floor and that the danger of infection of the feet is lessened accordingly.

CHILDREN'S BUREAU NEEDS MATERNAL AND CHILD HEALTH SPECIALISTS

Employment registers are to be established by the Civil Service Commission to fill positions of maternal and child health specialists in the Children's Bureau of the Department of Labor. Vacancies in similar positions in State agencies cooperating with the Children's Bureau may also be filled from these registers at the request of the States concerned. The examination announcement issued by the Civil Service Commission to recruit persons for those positions permits the filing of applications until November 15, 1941.

There are three fields in which persons may qualify, pediatrics, obstetrics, and orthopedics. For each of these fields employment lists will be established for administrative, research, and clinical positions. The duties of the administrative positions include giving consultations and advisory service to State and other Government agencies carrying out maternal and child health programs. The research positions involve the planning or directing of studies along such lines as infant and maternal mortality, and child growth in relation to social, economic, and other factors. Persons appointed to clinical positions will do clinical work in one of the options.

A written test will not be given for these positions. Competitors will be rated on their education, experience and corroborative evidence. Applicants must have been graduated from a medical school of recognized standing with an M. D. degree and must have served a 1-year internship. In addition they must have had full-time postinternship clinical training as well as other appropriate experience in the field selected and in the type of work in which they seek appointment.

Doctors of Medicine who are interested in this opportunity for Government employment are urged to seek further information about these positions which pay from \$3,200 to \$5,600 a year. Further information and application forms may be obtained from the Commission's representative at any first or second class post office or from the central office in Washington, D. C.

TREATMENT OF PHYSICIANS TESTIFYING IN COURT FOR GOVERNMENT

The occasional attempts of lawyers, by insulting, abusive attacks, to impeach the scientific objectivity, credibility and truthfulness of physicians testifying in court on behalf of government agencies, such as recently occurred in a Federal Trade Commission hearing, are assailed by The Journal of the American Medical Association for August 30. Commenting on "Doctors in Court and Lawyer Tactics," The Journal said:

Frequently physicians are requested to testify in court in behalf of government agencies. As public spirited citizens they do this at great sacrifice of time and energy and with no remuneration other than reimbursement for expenses. In cities such as Washington, Chicago and New York, where the Post Office Department, the Food and Drug Administration and the Federal Trade Commission are particularly active, the demands made on the time of such physicians are sometimes inordinately heavy. Government officials have said repeatedly that the enforcement of the laws administered by the agencies mentioned would hardly be possible without

this generous, voluntary cooperation of the medical profession. When a physician appears in court in the performance of a civic duty he is usually treated with courtesy and respect. Most practitioners of law recognize the nature of the situation and the professional status of their colleagues in medicine. Some lawyers, however, in their zeal to win, forget the decencies. In a recent hearing before the Federal Trade Commission a number of distinguished medical scientists, Drs. A. J. Carlson, Victor C. Myers and Donald D. Van Slyke, testified for the government against claims made by the Bristol-Myers Company for its product 'Sal Hepatica.' The claims concerned largely the problem of acidosis. According to an account of the trial, these scientists, who were there to perform a public service, were subjected to an insulting, abusive attack, endeavoring to impeach their scientific objectivity, credibility and truthfulness, and they were assailed then as to their motives and integrity. Apparently the attorneys were not content with an examination of the facts of the testimony. In this instance, it seems likely, the tactics employed will reap their just reward.

HAZARDS INVOLVED IN TREATMENT WITH SULFANILAMIDE

The hazards involved in treatment with sulfanilamide and its various related compounds are again emphasized in The Journal of the American Medical Association in a report in its September 6 issue by Max S. Wien, M.D. and Eugene P. Lieberthal, M. D., Chicago, of the case of a patient who died following a generalized skin eruption that resulted from treatment with sulfanilamide. The authors stated:

The increasing use of sulfanilamide, sulfapyridine and related compounds by physicians and their description in the lay press with subsequent indiscriminate, uncontrolled use by the public, emphasize the important need for the medical profession to be on the look-out for toxic manifestations occurring as a result of the use of these preparations by both the physician and the public.

The reaction in their patient resembled pemphigus foliaceus, a disease characterized by the formation of large, flaccid, scabby blisters filled with a watery fluid, which, after drying up, leave pigmented spots on the skin. Sulfanilamide treatment was inaugurated in this case for an inflammatory condition of the mastoid. The patient died several months later. The authors explain:

While it is intended that the public be impressed with the fear of toxic reactions in order to avoid the baneful sequelae which might result from the indiscriminate use of the sulfonamides, on the other hand a thorough knowledge of what reactions to expect and the recognition of them will help dispel the fear of toxic effects on the part of the physician, thus giving him a feeling of greater security in the use of these valuable new chemotherapeutic agents. . . .

They particularly emphasize the fact that the case reported demonstrates a similarity between certain elements in the group of symptoms associated with pemphigus and those occurring as a sequela to the administration of sulfanilamide for therapeutic purposes.

BIRTHS, MARRIAGES AND DEATHS**BIRTHS**

Dr. and Mrs. Harry B. Haisfield of Pensacola announce the birth of a son, Harry B., Jr., on September 16.

MARRIAGES

Dr. Claude M. Knight and Miss Helen Anne Bruce of Palatka were married on August 17.

Dr. M. Hayne Kendrick of Jacksonville and Miss Barbara Barrett Truesdell of Huntington, L. I., were married on September 6.

DEATHS

Dr. Thomas S. Anderson of Live Oak died September 14, 1941.

Dr. A. T. Eide of Lake Placid died on September 7.

Dr. Charles R. Marney of Tampa died on September 17.

Dr. Robert D. May of Jacksonville, died on October 6.

STATE NEWS ITEMS

Members of the State Association who wish to read papers at the annual convention to be held in Palm Beach, April 13, 14 and 15, 1942, are urged to file their applications at once with Dr. Herbert E. White, chairman of the Association's Committee on Scientific Work. Dr. White has announced that no general letter calling for applications will be mailed to the entire membership of the Association as was done last year. All applications should be addressed to Dr. Herbert E. White, Box 1018, Jacksonville.

Effective January 1, 1942, members of the Florida Medical Association will not be required to pay state dues while in military service. Members now in service are urged to pay their 1941 dues so they may be carried in 1942 without the payment of dues.

Dr. W. M. Rowlett of Tampa returned home the end of September after six weeks spent visiting medical colleges of the East and Canada.

Dr. I. E. Simmons, formerly health officer of Quincy and Fernandina, left the latter part of September for a three years' residency at the New York Postgraduate Medical School and Hospital where he will do ear, nose and throat work.

The Fourth Annual Forum on Allergy will be held at Detroit, Michigan, January 10 and 11, 1942.

Dr. Shaler Richardson of Jacksonville visited eye clinics in New York and attended the meeting of the American Academy of Ophthalmology and Otolaryngology in Chicago during the month of October.

Fifteen Florida doctors availed themselves of the opportunity to attend the postgraduate course in gynecological endocrinology offered by the University of Georgia School of Medicine at Augusta during the week of September 15 to 19. Those in attendance from Florida were: J. M. Bryant, Gerry R. Holden, Victor A. Hughes, S. I. Kemp of Jacksonville; J. R. Cogan and Maurice J. Rose, Miami Beach; R. Spencer Howell and Carlos P. Lamar, Miami; Thomas E. Daly, West Palm Beach; A. R. Frederick, St. Petersburg, J. M. Hoffman, Pensacola; G. W. King, Delray Beach; B. Y. Pennington, Lake Wales; J. R. Vallotton, Daytona Beach, and W. B. Clement, Punta Gorda.

This course was given by Dr. Robert B. Greenblatt, Professor of Experimental Medicine at the University of Georgia. Dr. Greenblatt is an outstanding authority on this subject and in this course took up in detail the more recent developments in this interesting field of medicine.

It is hoped that the course will be repeated next year so that other members of our State Association may take advantage of this wonderful opportunity to become more familiar with this important subject.

**DISTRICT MEETINGS**

"F" Hollywood, October 30

"D" Bartow, October 31

"E" Orlando, November 1

All members of the Association and of the Auxiliary are invited to attend these meetings. A scientific program, business session and special entertainment will feature each meeting.

Dr. William H. Ball of South Jacksonville announces the opening of his offices at 1570 Atlantic Boulevard. His practice will be limited to diseases of children.

Dr. John D. Ferrara of Jacksonville took the advanced course in cardiology at the Harvard Medical School during September.

Dr. H. G. Palmer of St. Petersburg visited the Mayo Clinic and clinics in Chicago and Detroit during the month of September.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, was the principal speaker at a dinner of the South Florida Crippled Children's Hospital in the Miami Civic Center, Tuesday, September 2. Dr. Fishbein was met at the Miami Airport on Sunday by Dr. Walter C. Jones, president of the Florida Medical Association, and Dr. Arthur H. Weiland, district surgeon of the state crippled children's commission.

Dr. Walter C. Jones of Miami was in Jacksonville, September 7, attending an NYA committee meeting.

Dr. S. C. Colley of Mount Dora spent two weeks in September at the University of Buffalo, doing postgraduate work.

Dr. Amelia B. Sheftall of Gainesville announces the opening of offices at 1134 West University Avenue. She will limit her practice to pediatrics.

Dr. W. Duncan Owens of Miami Beach did special work in neurosurgery at the University of Michigan Hospital, Ann Arbor, in September.

Doctors from Florida who attended the Southern Tuberculosis Conference in Asheville, N. C., September 15 to 17 were: John A. Kelk, Orlando; L. H. Kingsbury, Orlando; C. A. O'Quinn, Perry; D. T. Rankin, St. Augustine; J. E. Rawlings, Daytona Beach and R. D. Thompson, Orlando.

Dr. J. C. Davis of Quincy was reappointed a member of the State Board of Medical Examiners in September by Governor Holland.

Dr. Robert B. McIver of Jacksonville was the principal speaker at the local Rotary Club on September 15. His illustrated talk on medical aid for the indigent was intensely interesting.

Dr. L. M. Gable of St. Petersburg attended the Lahey Clinic in Boston during the month of September.

RALPH NELSON GREENE

On Friday, August 1, 1941, the Florida Medical Association lost one of its most beloved members. Dr. Ralph Nelson Greene had for many years been prominent in its programs and deliberations, and had served as its presiding officer. The death of this prominent and widely known physician was a distinct shock and an irreparable loss, not only to our State Association and its component bodies, but to innumerable colleagues and personal friends.

Ralph Nelson Greene was the unusual type of physician who could combine the arduous and technical features of the practice of medicine with those finer, human traits of gentleness, sympathy and inspiration. As a friend and counselor he had no peer. Particularly will he be remembered with love and reverence by those physicians who in their formative years of practice sought the advice and guidance of one who had met with difficulties incident to establishing a practice. The writer is one of many who can attest to his admirable helpfulness.

Dr. Greene was born in Indianapolis, Ind. in 1883, gained his early education in Georgia and attended the Memphis University School of Medicine in Memphis, Tenn., where he was graduated with a Doctor of Medicine degree in 1904. After serving an internship in Memphis hospitals, he came to Florida, practicing in Apalachicola and Greenville until 1909 when he became assistant chief physician at the State Hospital. The next year he was named chief of staff of the hospital, a post he held until in June, 1916 when he entered the Medical Corps of the U. S. Army.

Dr. Greene was early associated with aeromedicine. While with the Third Aero Squadron of the Army Signal Corps, he conducted the first aeromedical observations and is said to have engaged in the first recorded upside-down flight in a military airplane. He terminated his Army connection in 1919 with the rank of major and returned to Florida to become State Health Officer, in which office he served for two years with headquarters in Jacksonville. During this time he was given a reserve officer's rank of colonel in the Army, with the rating of flight surgeon.

He began the private practice of neurology in Jacksonville in 1921 and, as one of the numerous community services he rendered to Jacksonville, he was largely responsible for the reorganization of St. Luke's Hospital, whereby it was classified

as an A-1 organization by the American College of Surgeons. During the ensuing years, in the untiring prosecution of his specialty, the name of Dr. Ralph Greene became a byword in the southern states, as he made and cemented friendships both with his colleagues and the laity, friendships that became enduring mementos of his strong personality, sympathetic nature and willingness to spend his tireless energy for the benefit of his community and its citizenry.

In addition to being a past president of the Florida Medical Association, he served as presiding officer of the Aero-Medical Association of the United States, was a Fellow of the American Society of Psychiatrists, a Diplomate of the American Board of Psychiatry and Neurology, and held membership in the Southern and American Medical Associations.

Dr. Greene became an expert aviator early in his years of medical practice. He held Department of Commerce transport license No. 40 and was highly qualified as a lecturer on aviation medicine. He was the only physician in the United States to have an honorary membership in the Air Line Pilots' Association.

For the past several years Dr. Greene was a medical director for Eastern Air Lines, Inc., with headquarters in Coral Gables, Fla., working capably, efficiently and untiringly despite his gradually failing health.

To Ralph Nelson Green, the son of our departed friend, and to the other bereaved members of the latter's family, go our deepest sympathy. Ralph Nelson Greene, the son, has just received his degree in medicine and has begun his work in the Medical Department of the U. S. Army. May he follow unflinching in the footsteps of an illustrious father. The completion of his preparatory work had been anticipated with great pleasure by Ralph Nelson Greene, the senior.

The writer is sure that he speaks not only for himself but for uncounted others in voicing the personal grief and sense of loss in the passing of this great and good physician. It is said that when we have departed, our places are easily filled by those who follow, but in the case of our beloved friend, Dr. Ralph Nelson Greene, the vacancy in our hearts and esteem will always exist. Each of us may prove more worthy because of the contacts made with him and because of the example which he so unselfishly set. We

bow our heads in grief at his departure, but will be the better for having known and loved him.

(Signed) Ernest B. Milam.

JOHN KENT JOHNSTON

Dr. J. Kent Johnston of Tallahassee died suddenly in Jacksonville, July 16, at the age of 54. A native of Tallahassee, Dr. Johnston had practiced medicine in Tallahassee since 1913 except for eighteen months when he served as a World War surgeon in France.

Dr. Johnston was a graduate of the University of Maryland, class of 1912. After the completion of his medical training, he returned to Tallahassee to establish his practice. In 1924 he founded the Johnston Sanatorium which he continued to operate until the time of his death. It is the only approved hospital for white patients in Tallahassee.

Surviving Dr. Johnston are his sister, Mrs. B. J. Bond of Tallahassee, and two brothers, Rawls Johnston of Miami and Glover Johnston of West Palm Beach.

COMPONENT COUNTY SOCIETIES

DADE

Two scientific papers were read at the August 6 meeting of the Dade County Medical Society: "A Plan for Sterility in the Female," by Dr. J. Randolph Perdue, and "Sterility in the Male," by Dr. Perry D. Melvin.

A called meeting of the Society held Wednesday evening, August 27 at the Jackson Memorial Hospital, took the place of the September meeting.

PALM BEACH

At a meeting held on the evening of September 22 the Palm Beach County Medical Society approved a plan for the expansion of public health work in that county. The Society's proposal to the county commission calls for the employment of a full-time health officer with an assistant, to act as school physician, and a staff of nurses for school work.

How to Use S-M-A Powder

EACH PACKAGE OF S-M-A* CONTAINS ONE MEASURING CUP



1 Empty one tightly packed measuring cup of S-M-A powder into bottle.



2 Add enough warm previously boiled water to make one ounce.

3 Cap bottle and shake powder into solution. Feed at body temperature.



4 Easy, isn't it?



S-M-A READY TO FEED PROVIDES:

● 20 calories to the ounce, but more important, the nutritional value of S-M-A is that of a complete well-balanced food. When prepared as above, each quart provides:

10 mg. Iron and Ammonium Citrate
200 I. U. of vitamin B₁
400 I. U. of vitamin D
7500 I. U. of vitamin A

NORMAL INFANTS RELISH S-M-A—DIGEST IT EASILY AND THRIVE ON IT

*S-M-A, a trade mark of S-M-A Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addi-



tion of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

S. M. A. CORPORATION • 8100 McCORMICK BOULEVARD • CHICAGO, ILLINOIS

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

Factors in the Diagnosis of Intestinal Protozoa in Man and in the Interpretation of the Findings, BORLAND, J. L., Jacksonville, *Am. J. Digest. Dis.* 7: 401-407 (Oct.), 1940.

Investigation of protozoal infections still falls short of its deserved position because of the failure to recognize "(1) the incidence of protozoal infection in non-tropical zones, (2) the possibility of protozoa causing symptoms other than diarrhea, (3) the difficulty of finding and identifying organisms, and (4) the necessity for examining material which has not been rendered unfit by improper collection or the inadvisable use of drugs."

The incidence of *E. histolytica*, as averaged by Craig from the reports of numerous authors throughout the country is an astonishing 10 per cent.

The author discusses his views and those of other protozoologists in relation to the variations in severity of symptoms of infections caused by *E. histolytica*.

Great emphasis must be placed on the necessity for competent training in the microscopic examination of these protozoal infestations. The author unqualifiedly asserts that conclusions drawn from clinical observation alone are of more value than reports from a "technician who lacks long and specific protozoologic training."

The necessity for multiple stool examinations is well brought out. The old rule of three examinations is shown in his survey to be entirely inadequate as in 21 per cent of the cases diagnosed the infections by this protozoon were not discovered until after the third examination.

The securing of suitable material for examination is equally important. Liquid or soft stools are unsatisfactory, trophozoites having completely disintegrated in 15 minutes after passage, in one of the author's cases. Oil in the stool also renders examination unreliable. The use of barium and bismuth frequently results in erroneous negative conclusions, since both cause traumatic destruction of the ameba; also barium acts as a diluent, reducing the number of organisms per unit of volume.

ADVERTISERS' NOTES

A CHANGE IN SPELLING "PETROLAGAR"

A change in the spelling of the name "Petrolagar" to "Petrogalar" has been announced by the Petrogalar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in the size of the package, price, or formulae and that each of the five different types of the product will carry the new spelling "Petrogalar". The new corporate name is Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

DEPRESSION OR NO DEPRESSION,
WAR OR NO WAR

Since 1930, month after month, a unique series of educational-to-the-public advertisements have appeared on the first page of *Hygeia*. The sponsor's name, Mead Johnson & Company, has to be looked for with a magnifying glass, and appears only for copyright purposes. Not a product is ballyhooed. Instead, appears good, clean, convincing reasons, with choice illustrations, why mothers should seek pediatric advice from their physicians.

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review as expedient.

NEW AND NONOFFICIAL REMEDIES, 1941. By Council on Pharmacy and Chemistry, American Medical Association. In this book are described the medicinal preparations found by the Council on Pharmacy and Chemistry to be acceptable for the use of physicians. The book is cumulative; each year there are added the descriptions of products accepted during the foregoing year. Those taken off the market or found no longer worthy of continued acceptance are deleted. The book is at that time also revised to bring it up to date with the most recent medical thought. Until recent years the additions and deletions have about balanced. Recently, however, the bulk of the book has been increasing and this year's volume represents the largest book of the more than thirty volumes that have been issued.

This year's new additions include the new sulfanilamide derivative, sulfathiazole, as well as sulfapyridine sodium; antipneumococcal rabbit serum of types I, II, III, V, VII and VIII; human convalescent measles serum and human convalescent scarlet fever serum; and staphylococcus antitoxin. The field of endocrinology is represented by the addition of chorionic gonadotropin (follutein). The addition of shark liver oil reflects the search for new sources of vitamins A and D caused by the cutting off of foreign cod liver oil. Other newly accepted preparations are ampules of camphor, digilaid and magnesium trisilicate.

The most extensive revision is represented by the rearrangement and amplification of the chapter, Serums and Vaccines. This chapter is now prefaced by a helpful index, an innovation in N. N. R. The chapter on Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use has been revised to keep it abreast of the newer developments in this field. Here, too, we find something of an innovation in the systematic use of graphic chemical formulas. It is understood that this



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE^{*}
Wyeth

A complete technique of treatment and literature will be sent upon request

^{*}Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

practice will be extended to other parts of the book in future editions. Careful perusal will reveal minor revisions in many parts of the book made in the interest of greater clarity and in the effort to keep the book thoroughly up to date. Cloth, pp. 691. Price \$1.50. Chicago: American Medical Association, 1941.

MODERN DERMATOLOGY AND SYPHILIGOLOGY. By S. WILLIAM BECKER, M.D., Associate Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago, and Maximilian E. Obermayer, M.D., Assistant Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago. This is a distinctly new volume in the field of textbooks on dermatology. The book has been planned primarily as a textbook and contains several new features both as to arrangement and as to nature of material which will make it appeal to the medical student. The functional point of view has been dominant. Skin diseases are grouped according to common causation or diagnostic considerations which make natural grouping. There is a general consideration of therapy as has been the custom with other textbooks on diseases of the skin, but in addition special information is provided in relationship to each group of diseases. The bibliography for each chapter is brief but useful. There are 32 colored illustrations and a great number of illustrations in black and white, which naturally are of special value in a work on diseases of the skin. Another new feature is a chart of the treatment of syphilis worked out according to the technic of the University of Chicago Clinics but guided largely by the decisions of the Cooperative Group. A chart of this type is obviously useful as a guide to the general practitioner. The section on syphilis concludes the volume and the section itself is concluded with a discussion of the social aspects of the disease and the public effort against it. This is, of course, unique for a textbook on diseases of the skin and syphilis. A good index completes what is an exceptional volume. Cloth, pp. 871 with 493 illustrations. Price \$12.00. Philadelphia, Montreal & London: J. B. Lippincott Co., 1940.

PROCTOLOGY FOR THE GENERAL PRACTITIONER, Second Edition. By FREDERICK C. SMITH, M.D., formerly Associate in Proctology, Graduate School of Medicine, U. of Pennsylvania; Editor, The Weekly Roster and Medical Digest, Philadelphia County Medical Society; Editor, The Medical World. In his preface Dr. Smith states: "The author feels that there is a real need for a book on anorectal diseases designed to meet the needs of the general practitioner, one that covers the field fully but tersely and that also considers allied subjects. In the consideration of each subject, etiology, symptoms, diagnosis, and treatment have been given; and in some cases, notably in the treatment of intestinal parasites, this has included some newer developments. Controversial matter and material of no practical benefit to everyday practice purposely have been omitted." The first edition, published in 1939, has been largely rewritten and amplified for this Second Edition. Additional illustrations and several new subjects have been introduced. Cloth, pp. 705, illustrated. Price \$4.50. Philadelphia: F. A. Davis Co., 1941.

Thirty-Fifth Annual Meeting
SOUTHERN MEDICAL ASSOCIATION
St. Louis **November 10-13**

INDEX TO ADVERTISEMENTS

THIS ISSUE

Allen's Invalid Home.....	156
American Optical Co.	156
Attwood, J. K., Pharmacist	190
Brawner's Sanitarium	191
Combs Funeral Homes (Ambulance)....	193
Convention Press	193
Cook County Grad. Sch. of Medicine ...	154
Ferguson Funeral Home (Ambulance)....	193
Florida Medical Directory	191
Hand, Carey (Ambulance)	193
Holland-Rantos, Inc.	152
Hoye's Sanitarium	154
Hygeia	191
Kyle, S. A.	154
Lilly and Company, Eli	158
Mead Johnson & Co.	196
Medical Writing Service	178
Miami Retreat, Inc.	154
Miami Surgical Co.	154
Palm Beach Biltmore Hotel	157
Parke, Davis & Co.	153
Petrolagar Laboratories, Inc.	150
Physicians Casualty Assn.	191
Randolph's Sanitarium, Dr.	189
S. M. A. Corporation	187
Southeastern Optical Co., The	193
Southern Medical Association	181
Sun-Ray Park Health Resort	156
Surgical Supply Co.	189
Tucker Sanatorium, Inc.	194
Upjohn Co., The	155
Winthrop Chemical Co., Inc.	151
Wyeth & Bro., John	189

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

86c out of each \$1.00 gross income used
for members' benefit

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

Hospital, Accident, Sickness



INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

39 years under same management

\$2,000,000 INVESTED ASSETS
\$10,000,000 PAID FOR CLAIMS

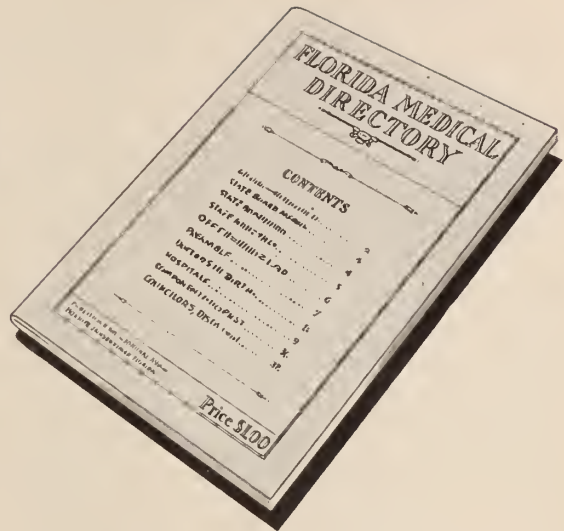
\$200,000 deposited with State of Nebraska for
protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to

400 First National Bank Building

OMAHA, NEBRASKA



1941 DIRECTORY

The latest published list of members of the medical profession in Florida. Medical laws, a list of approved hospitals and other valuable data are included in this publication. **ORDER YOUR COPY NOW.**

FLORIDA MEDICAL ASSOCIATION
Jacksonville, Florida

Please send me one copy of the fourth edition of the Florida Medical Directory. Enclosed is One Dollar (\$1.00).

Name

Address



Brawner's Sanitarium

SMYRNA, GEORGIA
(Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.

Approved diagnostic & therapeutic methods. Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.

Special Department for General Invalids and Senile cases at Monthly Rates.

JAMES N. BRAWNER, M.D., *Medical Supt.*
ALBERT F. BRAWNER, M.D., *Resident Supt.*



HYGEIA

The Health
Magazine
for Your
Waiting Room
Table

\$3.00 a Year

HYGEIA promotes confidence and understanding between physician and public. It is your own representative, giving in attractive printed form every month the health teaching you want your patients to have.

DIET	EXERCISE
SANITATION	CHILD CARE
RECREATION	BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION

535 N. Dearborn Street, Chicago

WOMAN'S AUXILIARYTO THE
FLORIDA MEDICAL ASSOCIATION, INC.**OFFICERS**

MRS. W. J. BARGE, PRESIDENT.....Miami
 MRS. F. W. KRUEGER, FIRST VICE-PRESIDENT.....Jacksonville
 MRS. R. L. CLINE, SECOND VICE-PRESIDENT.....Lakeland
 MRS. PAUL KELLS, CORRESPONDING SECRETARY.....Miami
 MRS. C. H. MURPHY, RECORDING SECY.-TREAS.....Bartow
 MRS. M. J. FLIPSE, HISTORIAN.....Miami
 MRS. L. C. INGRAM, PARLIAMENTARIAN.....Orlando

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, PRESS AND PUBLICITY.....Jacksonville
 MRS. P. J. MANSON, HYGEIA.....Miami
 MRS. RUPERT STOVALL, PUBLIC RELATIONS.....Ft. Lauderdale
 MRS. E. M. HENDRICKS, LEGISLATION.....Ft. Lauderdale
 MRS. GORDON H. IRA, FINANCE.....Jacksonville
 MRS. T. C. KENASTON, EXHIBITS.....Cocoa
 MRS. CLYDE ANDERSON, ARCHIVES.....St. Petersburg
 MRS. GEORGE C. TILLMAN, STUDENT LOAN.....Gainesville
 MRS. F. W. KRUEGER, PROGRAM.....Jacksonville
 MRS. R. L. CLINE, ORGANIZATION.....Lakeland
 MRS. JOHN H. OWENS, BULLETIN.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, NORTH CENTRAL "B".....Gainesville
 MRS. E. W. VEAL, NORTHEAST "C".....Jacksonville
 MRS. J. C. GRIFFIN, SOUTHWEST "D".....Tampa
 MRS. W. C. PAGE, SOUTH CENTRAL "E".....Cocoa
 MRS. HILLARD WILLIS, SOUTHEAST "F".....Coral Gables

ANNOUNCEMENT

Mrs. W. J. Barge, state president, is very anxious that a large delegation from Florida attend the meeting of the Southern Medical Auxiliary to be held in St. Louis, Mo., November 10 to 13. If you have not already done so, please make reservations at once. For further information, get in touch with your County Medical Society.

DUVAL COUNTY AUXILIARY

The October meeting of the Woman's Auxiliary to the Duval County Medical Society was held in the home of Mrs. J. Lunsford Boone, on Thursday afternoon, October 2, at 3 o'clock, with the president, Mrs. Raymond H. King, presiding.

Judge Miles W. Lewis, guest speaker, paid high tribute to the medical profession. He said the salvation of the world depends greatly on the doctors, who have to cope with hundreds of mental and physical diseases and the injuries that result from natural and artificial perils that mankind faces. He said that Ingersoll really believed in God and had paid the medical profession the tribute of saying that the doctors practiced in partnership with God and thought they deserved the intelligent cooperation of every individual and society in general.

Much emphasis was placed on the Bulletin of the Woman's Auxiliary to the American Medical Association, and members urged to sub-

scribe to it as official programs and material for standing committees will be printed in the Bulletin from now on, instead of in leaflets as formerly.

Mrs. Edward Canipelli, philanthropic chairman, asked members to cooperate with the Red Cross in the national defense program. She distributed material to those present so that each one could sew during the meeting. About 48 garments were completed.

Mrs. Gordon H. Ira announced that a district meeting of the Auxiliary would be held at Gainesville on Friday, October 3, and another at St. Augustine on Saturday, October 4, at which time a State Board meeting would also be held. She asked those who were planning to attend to make reservations at once for the luncheon.

Immediately following the meeting, members were invited into the dining room where delicious refreshments were served by the hostess. Mrs. Ernest B. Milam, poured. A delightful social hour followed at which time the wives of doctors in the Army, Navy and Air services were given a cordial welcome. About 40 attended the meeting.

**1941
DISTRICT
MEETINGS**

"F" Hollywood, October 30

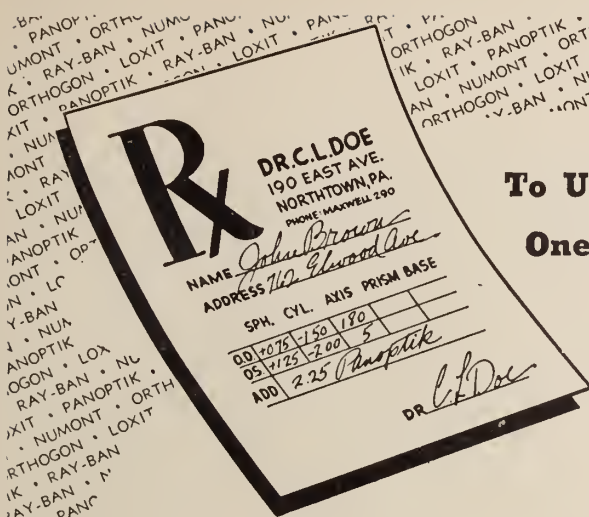
"D" Bartow, October 31

"E" Orlando, November 1

All members of the Association and of the Auxiliary are invited to attend these meetings. A scientific program, business session and special entertainment will feature each meeting.

**PATRONIZE JOURNAL
ADVERTISERS**

THEIR PRODUCTS HAVE
 BEEN COUNCIL-PASSED.
 THEIR INSTITUTIONS HAVE
 BEEN APPROVED BY
 THE A. M. A.



To Us the Vision of One Person Is At Stake

EVERY day hundreds of prescription blanks come into our office, hundreds of pairs of glasses go out. Yet to us, each prescription represents one pair of eyes, one opportunity to serve in the guarding of vision and health. We know that the efficient functioning of the glasses—and the eyes they are to help—depends on the accurate interpretation of examination findings. That's one reason so many practitioners confidently place their prescription work with us.

SOUTHEASTERN OPTICAL COMPANY
distributors of **BAUSCH & LOMB** products

*convention
press*

two eighteen west church street
jacksonville, florida

printers
publishers

Ambulance Directory

CAREY HAND

32-36 Pine Street
ORLANDO, FLORIDA
Telephone 4181

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive
WEST PALM BEACH, FLA.

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association	Walter C. Jones, Miami	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest	William C. Roberts, Panama City.....	Stewart Thompson, Jacksonville.....	Panama City, 1942
B—North Central	Alva T. Cobb, Gainesville.....	“ “ “	Ocala, 1942
C—Northeast	Maximilian Stern, Daytona Beach	“ “ “	Jacksonville, 1942
D—Southwest	Howard V. Weems, Sebring.....	“ “ “	Bartow, October 31, 1941
E—South Central	Carl D. Hoffmann, Orlando.....	“ “ “	Orlando, November 1, 1941
F—Southeast	Robert L. Elliston, Ft. Lauderdale	“ “ “	Hollywood, October 30, 1941
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery.....	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta.....	E. D. Shanks, Atlanta.....	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami.....	Palm Beach, Apr. 12-13, 1942
State Dental Society.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	Hollywood, Dec. 8-10, 1941
Soc. of Derm. and Syph.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association.....	J. S. Stewart, Miami.....	J. Ralston Wells, Daytona Beach.....	Daytona Beach, Dec. 4-5, 1941
State Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	
Assn. of Industrial Surgeons.....	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman	
Soc. of Ophthal. & Otol.....	S. B. Forbes, Tampa.....	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
State Nurses Association.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine	Hollywood, Nov. 2-5, 1941
Pathological Society.....	L. Y. Dyrenforth, Jacksonville	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach.....	Hollywood, Nov. 1941
State Pharmaceutical Association.....	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association.....	L. J. Graves, Tallahassee.....	E. M. L'Engle, Jacksonville.....	Orlando, December 4-6, 1941
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association.....	Leland F. Carlton, Tampa.....	W. C. Page, Cocoa.....	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	Fall, 1941
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Gulf Coast Clinical Society.....	J. S. Turberville, Century.....	J. C. McSween, Pensacola.....	Pensacola, October 16-17, 1941
S.E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	Memphis, May, 1942
Southeastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association.....	Paul H. Ringer, Asheville.....	Mr. C. P. Loranz, Birmingham.....	St. Louis, Nov. 11-14, 1941
Suwannee River Medical Society.....	E. C. Crouch, Jasper.....	T. H. Bates, Lake City.....	Lake City, December, 1941

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	William C. Roberts, M.D. Panama City		12	10	A-1-'42 W. C. Roberts, M. D. Panama City
	Escambia *Santa Rosa	W. P. Hixon, M.D. 24 W. Chase St. Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	46	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		7	6	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahatchka	J. R. Norton, M.D. Port St. Joe	3rd Thursday	5	4	A-2-'43 C. D. Whitaker, M.D. Marianna
	Jackson *Calhoun	M. Q. Burns, M.D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	Sterling E. Wilhoit, M.D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	41	32	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	11	B-3-'43 J. M. Price, M.D. Live Oak
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	100%	
	Taylor *Dixie, Lafayette	Ralph J. Greene, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	
B	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	J. Maxey Deil, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	30	24	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Marion *Levy	Eugene G. Peek, M.D. Commercial Bk. & 1st Bldg., Ocala	Harry F. Watt, M.D. Box 146 Ocala	3rd Thursday 12:30 P. M.	26	20	
	Pasco-Hernando- Citrus	William B. Moon, M.D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	100%	
	Duval *Clay, Nassau	S. K. Norris, M.D. Medical Arts Bldg. Jacksonville	F. Gordon King, M.D. 422 St. James Bldg. Jacksonville	1st Tuesday 8:15 P. M.	185	183	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
	St. Johns	A. C. Walkup, M.D. East Coast Hospital St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	
	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganious, M.D. Palatka	2nd Tuesday in Feb., Apr. Jun., Aug., Oct., Dec. 7:00 P. M.	11	9	C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	42	
	Hillsborough	Robert G. Nelson, M.D. 712 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	109	85	D-7-'43 John R. Boling, M.D. Tampa
	Manatee	W. E. Wentzel, M.D. Box 245, Bradenton	Wm. D. Sugg, M.D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	
	Pinellas	N. W. Gable, M. D. 116 Field Artillery Camp Blanding	W. C. McConnell, M.D. 313 First Fed. Bldg. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	104	100%	
D	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	16	
	DeSoto-Hardee- Highlands-Char- lotte-Glades	A. T. Eide, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	21	20	D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	M. F. Johnson, M.D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	
	Polk	Bruce R. Tinkler, M.D. Lake Wales	S. Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	61	58	
	Brevard	T. C. Kenaston, M.D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	100%	E-9-'42 Carl D. Hoffmann, M.D. Orlando
	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bk. Bldg. Leesburg	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	20	13	
	Orange *Osceola	Frank D. Gray, M.D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	87	80	
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	10	
	St. Lucie-Okeecho- bee-Indian River- Martin	Joseph B. Kollar, M.D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Ft. Lauderdale	4th Wednesday 8:00 P. M.	41	38	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
F	Palm Beach	Wilbur O. Arnold, M.D. Box 1785 W. Palm Beach	William E. Bippus, M.D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	64	
	Dade	C. Larimore Perry, M.D. 525 N. E. 15th St. Miami	Herbert Eichert, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	337	250	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

Why MEAD JOHNSON & COMPANY COOPERATES WITH THE COUNCIL

MEAD PRODUCTS, COUNCIL-ON-PHARMACY ACCEPTED:

Mead's Oleum Percomorphum (liquid and capsules); Mead's Cod Liver Oil Fortified With Percomorph Liver Oil; Mead's Viosterol in Halibut Liver Oil (liquid and capsules); Mead's Cod Liver Oil With Viosterol; Mead's Viosterol in Oil; Mead's Standardized Cod Liver Oil; Mead's Halibut Liver Oil; Mead's Mineral Oil With Malt Syrup; Mead's Ascorbic (Cevitamic) Acid Tablets; Mead's Thiamine Hydrochloride (Thiamin Chloride) Tablets; Mead's Nicotinic Acid Tablets; Mead's Menadione in Oil.

MEAD PRODUCTS, COUNCIL-ON-FOODS ACCEPTED:

Dextri-Maltose Nos. 1, 2, & 3; Mead's Dextri-Maltose With Extracts of Wheat Embryo and Yeast (formerly Dextri-Maltose With Vitamin B); Pabulum; Mead's Cereal; Mead's Brewers Yeast (powder and tablets); Mead's Powdered Protein Milk; Mead's Powdered Lactic Acid Milk Nos. 1 and 2; Alacta; Casec; Sobee; Olac; Mead's Pectin-Agar in Dextri-Maltose.

ALL MEAD PRODUCTS
ARE COUNCIL-ACCEPTED

VOLUNTARILY, we market only Council-Accepted products because we have faith in the principles for which the Council on Pharmacy and Chemistry (and the Council on Foods) stand.

We have witnessed the three decades during which the Council has brought order out of chaos in the pharmaceutical field. For over thirty years it has stood—alone and unafraid—between the medical profession and unprincipled makers of proprietary preparations.

The Council verifies the composition and analysis of products, and substantiates the claims of manufacturers. By standardizing nomenclature and disapproving therapeutically suggestive trade names, it discourages shotgun therapy and self-medication. It is the only body representing the medical profession that checks inaccurate and unwarranted claims on circulars and advertising as well as on packages and labels.

The Council, through N. N. R. and in other ways, augments the work of the U. S. Pharmacopoeia, testing and evaluating scores of new products which appear during the 10-year interim between Pharmacopoeial revisions.

We are conscious of the fact that the Council has at times been criticized both in and out of the medical profession. We hold no brief for perfection in any human agency. But we subscribe to the fact that the work of the Council is sound in principle; and in this high-pressure day and age, we shudder to think of a return to the unrestrained patent-medicine-quack-nostrum conditions of three decades ago, when there was chaos instead of Council.

MEAD JOHNSON & COMPANY
EVANSVILLE, IND., U.S.A.



The JOURNAL

of the

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 5

Jacksonville, Florida, November, 1941

Yearly Subscription, \$3.00
Single Copy, 30c

CONTENTS

Application of the Synthetic Sex Hormones, Male and Female, in their Newer Forms: Preliminary Report of Therapy with Stilbestrol and Methyl Testosterone, Carlos P. Lamar, M.D., Miami.....	211
Preventriculosis: Report of a Case, C. J. Heinberg, M.D., Pensacola	222
Experiences of a Railway Surgeon and Country Doctor, Z. Brantley, M.D., Grandin	226
The Use of Pitressin in Preoperative and Postoperative Treatment, LeRoy A. Wylie, M.D., St. Petersburg.....	229
Editorial: Pre-convention Meeting.....	232
Deferment of Medical Students	232
Violations of Medical Practice Act	233
Medical District Meetings.....	233
Births, Marriages and Deaths.....	235
State News Items.....	236
Component County Societies.....	238
Abstract Department	240
Advertisers' Notes	242
Woman's Auxiliary	244
State and Sectional Meetings.....	250
Component Societies by Districts.....	251

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942



Petrolagar* . . .

As a Bland Cleansing Enema

- The effect of a Petrolagar cleansing enema is to soften thoroughly the inspissated stool, and help establish a complete, comfortable bowel movement. Petrolagar serves this purpose well because it is miscible with water, a virtue that enables an even dissemination of minute oil globules throughout the residue in the colon.

The Petrolagar cleansing enema is preferable to irritating soap solutions in either the home or the hospital, because of its gentle, but thorough softening action.

Consider the routine use of the Petrolagar cleansing enema in the hospital, postoperatively or in obstetrical cases, where normal bowel habits are temporarily disturbed.

How to use: Mix 3 ounces of Petrolagar Plain with water sufficient to make one pint to one quart, as desired, and administer by gravity. For retention enema administer at body temperature.



**Petrolagar—The trademark of Petrolagar Laboratories, Inc., brand emulsion of mineral oil . . . Liquid petrolatum 65 c.c. emulsified with 0.4 gm. agar in a menstruum to make 100 cc.*



Which One?

ONE of these apparently healthy children has developed measles, although the characteristic signs and symptoms may not appear for as long as four days. Meanwhile, the entire group (and perhaps many others) has been exposed to this highly infectious disease, which, during the winter months especially, in schools, camps, and other crowded communities, carries with it the threat of fatal bacterial pneumonia.

Immune Globulin (Human), Mulford, a concentrated preparation obtained from human placental blood and tissue,

is specifically indicated for the control of measles. In the majority of susceptible contacts the early injection of Immune Globulin (Human), Mulford, produces either: (1) Temporary, passive immunity to measles, or (2) Incomplete immunity which modifies and lessens the intensity of the disease and possibility of complications, while permitting the development of solid active immunity.

Immune Globulin (Human), Mulford, is standardized to contain a definite protein content. Uniform potency is attained by pooling.

IMMUNE GLOBULIN (Human), MULFORD

Sharp & Dohme

MULFORD BIOLOGICAL LABORATORIES



Immune Globulin (Human), Mulford, is supplied in packages of one 2-cc. ampoule-vial and one 10-cc. ampoule-vial.

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE

Florida Medical Ass'n Convention

APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION



"At the menopause 80 per cent of women experience general symptoms of varying character and intensity¹."

AMNIOTIN

Relieves
Menopausal
Symptoms

JEFFCOATE,¹ in a paper on estrogenic hormone therapy, states that 80 per cent of women experience menopausal symptoms varying from the well-recognized vasomotor disturbances to those of vaguer character such as headaches, emotional instability, depression, anxiety and muscle pains. In a large percentage of cases these symptoms can be eliminated by adequate estrogenic therapy.

During the more than 10 years in which Amniotin has been available to the medical profession its clinical effectiveness in controlling menopausal symptoms has been abun-

dantly demonstrated. It differs from estrogenic substances containing or derived from a single crystalline factor in that it contains, in highly purified form, estrogenic substances naturally present in pregnant mare's urine. Its estrogenic activity is expressed in terms of the equivalent of international units of estrone.

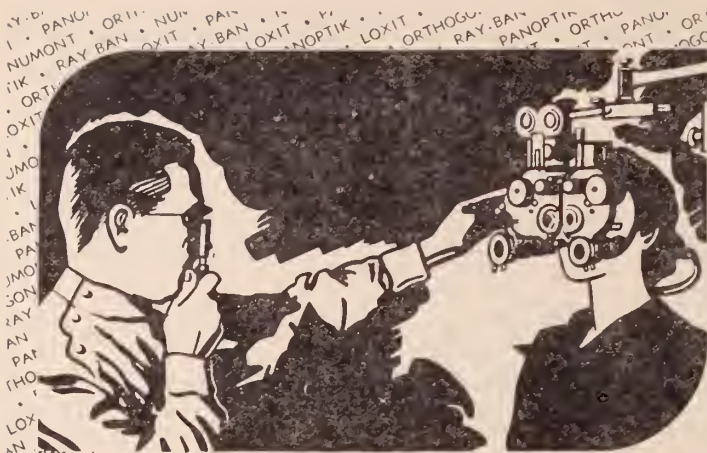
Amniotin is available in Capsules containing the equivalent of 1000, 2000 and 4000 I. U. of estrone; in Pessaries containing 1000 and 2000 I. U. and in 1-cc. ampuls containing 2000, 5000, 10,000 and 20,000 I.U.

¹ Jeffcoate, T. N. A.: *Brit. Med. J.* 2:671 (Sept. 30) 1939.

For literature address the Professional Service Department,
E. R. Squibb & Sons, 745 Fifth Avenue, New York, N. Y.

Amniotin

A SQUIBB PREPARATION OF ESTROGENIC SUBSTANCES
OBTAINED FROM THE URINE OF PREGNANT MARES



HERE Speed

Makes for Accuracy

WHEN you've used too much time fumbling with test lenses, delaying between one lens and the

next, patients become fatigued, their decisions become undependable. With Greens' Refractor, changes of power are made with a touch of the finger, and precision vertex power lenses mean an *exact* finding as well as a quick one. We will gladly arrange a demonstration.

SOUTHEASTERN OPTICAL COMPANY

distributors of BAUSCH & LOMB products



Brawner's Sanitarium

SMYRNA, GEORGIA
(Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.
Approved diagnostic & therapeutic methods.
Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.
Special Department for General Invalids and Senile cases at Monthly Rates.

JAMES N. BRAWNER, M.D., *Medical Supt.*
ALBERT F. BRAWNER, M.D., *Resident Supt.*

86c out of each \$1.00 gross income used for members' benefit

PHYSICIANS CASUALTY ASSOCIATION PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	For \$32.00 per year
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	For \$64.00 per year
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	For \$96.00 per year

39 years under same management

\$2,000,000 INVESTED ASSETS

\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to

400 First National Bank Building

OMAHA, NEBRASKA



THE THIN MAN

The undernourished, underweight individual, whether man, woman or child, requires special dietetic attention. COCOMALT, three times daily in milk, when extra calories and additional food essentials are needed, is often recommended by the profession. As a between-meal feeding, it has also proven of value.

Recent studies¹ show that in groups of both children and aged the addition of COCOMALT to the diet in regular amounts resulted in substantial weight gains and improved blood picture. Further mentions are made by medical commentators² with inclusion of COCOMALT in successful diet lists for thin patients.

The vitamin-mineral character of this malted food drink supplies important nutrients in diets for all ages. COCOMALT also provides a drink whose taste appeal acts as an incentive to drink more milk.

Cocomalt

... for both normal and therapeutic diets ... contains calcium, phosphorus, iron ... Vitamins A, B₁, D ... Quick energy and body building nutrients.



C O C O M A L T
Enriched Food Drink for All Ages

R. B. DAVIS COMPANY • Hoboken, N. J.

¹ Arch. of Ped.—56:Nov. 1939
Medical Rec.—Aug. 21, 1940

² Medical Rec.—150:1:1939;
Arch. of Ped.—57:488 (July) 1940

KOROMEX DIAPHRAGM



TIP TURNS
ON SWIVEL

**KOROMEX
TRIP-RELEASE INTRODUCER**

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

KARO FORMULAS FOR NORMAL INFANTS

AGE—TWO WEEKS

Milk.....10 ozs.
Water.....10 ozs.
Karo syrup..... 2 tbs.
3 ozs. every 4 hrs.—6 feedings

AGE—ONE MONTH

Milk.....12 ozs.
Water.....13 ozs.
Karo syrup..... 2½ tbs.
4 ozs. every 4 hrs.—6 feedings

AGE—TWO MONTHS

Milk.....15 ozs.
Water.....13 ozs.
Karo syrup..... 3 tbs.
4½ ozs. every 4 hrs.—6 feedings

AGE—THREE MONTHS

Milk.....17 ozs.
Water..... 9 ozs.
Karo syrup..... 3 tbs.
5 ozs. every 4 hrs.—5 feedings

AGE—FOUR MONTHS

Milk.....20 ozs.
Water.....11 ozs.
Karo syrup..... 3½ tbs.
6 ozs. every 4 hrs.—5 feedings

AGE—FIVE MONTHS

Milk.....23 ozs.
Water.....11 ozs.
Karo syrup..... 4 tbs.
6½ ozs. every 4 hrs.—5 feedings

AGE—SIX MONTHS

Milk.....26 ozs.
Water.....10 ozs.
Karo syrup..... 4 tbs.
7 ozs. every 4 hrs.—5 feedings

The amount of Karo in each formula is optional. During the summer, it may be reduced according to the baby's digestive reaction.



A FORMULA of whole cow's milk, carbohydrate and water may be calculated for the individual infant according to the following requisites:

(1) The amount of cow's milk necessary will be 1.5 to 2.0 ounces per pound (100 to 130 cc per kilo) of expected body weight per day; or, one-half to two-thirds of the total calories required for the infant.

(2) The amount of added Karo syrup required will be about one-tenth of the quantity of milk used, i.e., 0.15 to 0.2 ounces per pound (0.1 to 1.13 grams per kilo) of expected body weight per day, or one-third to one-half the total calories required for the infant.

(3) The total caloric value of the formula should be approximately 50 to 55 calories per pound (110 to 115 calories per kilo) of body weight per day.

(4) The amount of water added to the formula will be two to three ounces per pound (130 to 200 cc per kilo) of body weight per day; and the amount of water added to the formula for the 24-hour period depends upon the degree of dilution required to render the mixture digestible.

(5) The amount of formula offered at a feeding during the first few months is expressed by the rule—Age in months plus two ounces at four-hour intervals."

KUGELMASS: "Newer Nutrition in Pediatric Practice." 1940.

CORN PRODUCTS SALES COMPANY
17 Battery Place, New York City

"HOW MUCH DO YOU SMOKE?"

is only part of the question!

Far more important than "How many cigarettes do you smoke?" may be the question, "How irritating is your cigarette?"

Recognized laboratory tests* showed that the irritant quality in the smoke of four other leading brands averaged more than three times the strikingly contrasted Philip Morris.

The possibility of irritation from smoking can be minimized by suggesting a change to Philip Morris.

PHILIP MORRIS

Philip Morris & Company, Ltd., Inc., 119 Fifth Avenue, New York



*Facts from: Proc. Soc. Exp. Biol. & Med., 1934, 32, 241-245; N. Y. State Jnl. of Med. Vol. 35, No. 11,590; Arch. of Otolaryngology, Mar. 1936, Vol. 23, No. 3,306

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

"When the frost is on the punkin . . ."



The pollens are gone with the frost and your allergic patients breathe freely again. But with the fall come colds and upper respiratory infections, and to obtain relief from the nasal congestion from these causes you will again have need of a reliable decongestant.

Local application of Solution Racêphedrine Hydrochloride (Upjohn) to nasal mucous membranes diminishes hyperemia and reduces swelling. In many cases Capsules Racêphedrine Hydrochloride (Upjohn) are also useful in ameliorating these symptoms.

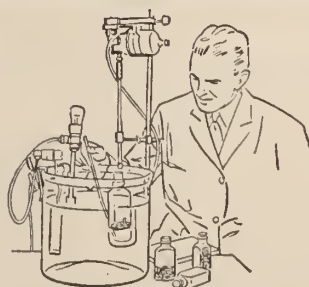
**RACÊPHEDRINE HYDROCHLORIDE
(UPJOHN)**

is available as:

Solution Racêphedrine Hydrochloride (Upjohn) 1% in Modified Ringer's Solution, in one ounce dropper bottles for prescription purposes, and in pint bottles for office use

Capsules Racêphedrine Hydrochloride (Upjohn), $\frac{3}{8}$ grain, in bottles of 40 and 250

Powder Racêphedrine Hydrochloride (Upjohn), in $\frac{1}{4}$ ounce bottles



Determination of gelatin solubility is one laboratory test in the assay of finished capsules.

Upjohn
KALAMAZOO, MICHIGAN



Fine Pharmaceuticals Since 1886



PONTOCAINE HYDROCHLORIDE *in* OPHTHALMOLOGY

Surface Anesthetic with Prolonged Effect

● Tests such as those reported from the Wilmer Ophthalmological Institute of Johns Hopkins Hospital and observations made repeatedly by others in ophthalmologic practice have demonstrated that Pontocaine hydrochloride possesses the characteristics required of a satisfactory surface anesthetic.

PONTOCAINE HYDROCHLORIDE . . .

*acts quickly . . . penetrates deeply . . . does not dilate
the pupils . . . does not increase intra-ocular tension.*

A wide variety of operative and nonoperative procedures may be carried out under surface anesthesia with Pontocaine hydrochloride, including removal of deep seated foreign bodies from the cornea, probing the lacrimal duct, cauterization, treatment of corneal ulcer, tonometry, cataract extraction and trephining and other treatment of glaucoma.

HOW SUPPLIED: For surface anesthesia in ophthalmology, Pontocaine hydrochloride 0.5 per cent solution, in bottles of ½ oz. and 2 oz. To maintain sterility, chlorobutanol (0.4 per cent) is added.

PONTOCAINE

Trademark Reg. U.S. Pat. Off. & Canada

Brand of TETRACAINE

(Para-butyl-aminobenzoyl-dimethyl-amino-ethanol)

HYDROCHLORIDE



Accepted by the Council on Pharmacy and Chemistry of the American Medical Association
Write for booklet giving essential details regarding chemistry, action, indications and manner of use.

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.

WINDSOR, ONT.

"SEE YOUR DOCTOR!" Reproduced below is Number 171 of a series of full-page advertisements published by Parke, Davis & Co. in the interest of the medical profession. This "See Your Doctor" campaign has been running in *The Saturday Evening Post* and other leading magazines for thirteen years.



The man who nearly died . . . from a few kind words

BYOND THAT DOOR lies a very sick man. True, his doctor says he is going to pull through. But he has come mighty close to paying a tragic price for a few words of free advice from a well-meaning friend.

When he complained of a nagging pain in his abdomen, his friend said: "You've probably eaten something that's poisoned you. Here's what *I'd* do . . ."

So he promptly followed his friend's suggestion and took a cathartic. And in a matter of hours he was being rushed by ambulance to the hospital . . . with a ruptured appendix.

His friend, of course, had acted from the kindest of motives. But he didn't know that an abdominal pain might mean acute appendicitis, in which case a cathartic should never be taken.

Unfortunately, appendicitis is only one of many illnesses where amateur medical advice can result in tragedy. Yet, human nature being what it is, many people just can't resist the temptation to offer advice when a friend is sick.

Intelligent medical treatment depends upon various factors which only a physician is qualified to evaluate. When something

seems wrong with you, it is the part of wisdom to observe this common-sense rule: Take a friend's advice about buying a radio, a car, or even a home if you wish; but don't let him advise you about your health.

Don't let a friend who *means* well tell you how to *get* well. To get well, and *keep* well, the man to see is your physician.

Copyright, 1941, Parke, Davis & Co.

PARKE, DAVIS & COMPANY
Detroit, Michigan

*Seventy-five years of service to
medicine and pharmacy*

SEE YOUR DOCTOR



*Treatment of disease,
to a great extent, is
built on confidence.
The patient believes
in the competence of
his physician, and
the doctor, in turn,
relies upon the com-
pany whose products
he prescribes.*

SECONAL

(Sodium Propyl-methyl-carbinyl Allyl
Barbiturate, Lilly)

'Seconal' fulfills the requirements for a hypnotic in the majority of medical and surgical patients. Action is prompt, the period of sleep is restful, aftereffects are negligible. 'Seconal' has definite uses in insomnia, nervousness, extreme fatigue with restlessness, and similar conditions where only a brief sedative effect may be required to allow onset of natural sleep.

Supplied in 3/4-grain and 1 1/2-grain pulvules in bottles of 40 and 500.

ELI LILLY AND COMPANY

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.
PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, November, 1941

Number 5

APPLICATION OF THE SYNTHETIC SEX HORMONES, MALE AND FEMALE, IN THEIR NEWER FORMS

A PRELIMINARY REPORT OF THERAPY WITH STILBESTROL AND METHYL TESTOSTERONE

CARLOS P. LAMAR, M.D.
MIAMI

STILBESTROL THERAPY*

Estrogens have been employed for several years in the treatment of menopause and several other syndromes associated with ovarian failure. It is a well known fact that the cessation of ovarian function induced either surgically or radiologically, as well as the suppression of the activities of the ovaries that takes place insidiously during the climacteric, is soon followed by an increased basophilic pituitary function, and prolactin A, the follicle-stimulating gonadotropin, appears then in the urine. The same physiologic phenomenon, though in variable lesser degree, occurs in cases in which the ovarian function is decreased as the result of insufficient somatic development or as a consequence of infectious or other systemic diseases affecting the ovaries.

In all these instances the gonadotropic factor is present in the urine, and in all of them variable symptoms appear concurrently as a manifestation of the nervous and endocrinic imbalance. Estrogen depresses the gonadotropic function of the pituitary gland with the subsequent cessation of the symptoms of hypoposterinism, whether they are caused by the menopause or other types of ovarian failure.

Although the initial reports on the use of estrogenic substance were not uniform as to successful results, the introduction of crystalline natural estrogens in sufficiently large dosage

has proved the physiologically sound basis of estrogenic substitution therapy. The next desirable improvement was the avoidance of the inconvenience of repeated injections by substitution of a form of oral therapy that would be sufficiently reasonable in price to be available to all who need it and would also provide a more constant level of estrogenic principle closely resembling the natural ovarian secretion. As Mazer and his associates¹ pointed out, two principal drawbacks attend the oral use of the natural estrogens, namely, the high cost and the loss of their potency when given orally, for it decreases to only about 5 per cent of that of the same amounts given by injection.

In 1937 Dodds and Lawson² in England announced the discovery of a substance known since as stilbestrol (4:4-dihydroxy-stilbene) with pharmacologic properties almost identical with those of natural estrogen. Several derivatives of this artificial estrogen are at present under investigation, the most widely known being the 4:4-dihydroxy-alpha:beta-diethylstilbene, frequently referred to as diethylstilbestrol, and the dipropionate ester of diethylstilbestrol, which seems to be most active and the least toxic so far.^{3,4} It is the one with which the work is being conducted at Jackson Memorial Hospital.

Stilbestrol is a potent estrogen providing a constant blood level of estrogenic factor that replaces in a physiologic-like manner the lacking ovarian estrogen in cases of hypoposterinism. It can be administered orally. Its potency has been repeatedly demonstrated. It is known that 0.2 microgram represents 1 Allen-Doisy unit, which is the estrogenic potency contained in 1.0 microgram of estrone¹. To produce the same estrogenic effects with orally administered natural estrogen, from ten to twenty times the dose given subcutaneously is required. In the case of stilbestrol only from three to five times the dose given hypodermically is needed. Thus administered orally, stilbestrol has over twenty times the potency of estrone and at least twice the potency of estradiol benzoate.

Stilbestrol has been widely used in Europe and Canada and has been extensively investigated in this country. Its action has been demonstrated

A preliminary report on the work being done in the Department of Endocrinology and Nutrition of the Jackson Memorial Hospital with the synthetic estrogen (stilbestrol) and the synthetic androgens (testosterone, subcutaneous implantation pellets, and methyl testosterone for oral administration).

*This work is being made possible by generous supplies of stilbestrol tablets furnished by the Medical Research Department of the Winthrop Chemical Co.

Read before the Sixty-eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, April 28, 29 and 30, 1941.

in the treatment of the menopausal syndrome, migraine, amenorrhea, juvenile vulvovaginitis, dysmenorrhea, the suppression of lactation, the prevention of the toxemia of pregnancy with the reduction of fetal mortality in cases in which certain types of diabetic women have high gonadotropic content of the urine,⁸ and even in the treatment of cases of male hypergonadism with which criminal tendencies are associated, with the incidental artificial induction of gynecomastia in a male as further demonstration of its high estrogenic potency.⁹

Different forms of administration have been investigated including the subcutaneous, oral, percutaneous and vaginal routes.^{7,10} The oral form of administration is of course the most desirable and in this particular stilbestrol seems to meet a well defined need.

Toxic effects of this drug have been demonstrated in animals, but the doses administered were exceptionally high when compared to those required for therapeutic effect in the human.⁹ All experiments indicate that there is a broad margin for safety between the toxic and the effective doses even for the laboratory animal.¹⁰ The only apparent deleterious effect obtained in animals with relatively small doses was the interruption of pregnancy by acceleration of the rate of tubal passage and a toxic effect upon the ova and corpora lutea in pregnant mice;¹¹ even in these instances, the doses required were comparatively very much higher than the relative doses employed therapeutically in man.

Although some authors reported the size of the dose, when used therapeutically, in direct proportion to the degree of toxic manifestations,^{1,12} others presented evidence to the contrary.^{8,13,14,15} The reports of the percentage of incidence of toxicity vary from 80 per cent^{13,16} to 5 per cent^{3,8,17} and less of the number of treated cases, even in the presence of relatively high doses.

There are also discrepancies in respect to the possible relationship of the mode of administration and the toxic symptoms. Some investigators observed that the drug is more toxic when administered hypodermically than orally.¹ Others concluded its effect is too toxic when it is given either orally or hypodermically, and they advised percutaneous inunction in alcohol, or vaginal suppositories.⁷ Some believed it to be so toxic that they discontinued its use.¹⁶ Most of the investigators observed little difference between

the different forms of administration.¹² Enteric-coated tablets and gelatin capsules have been tried in an attempt to diminish gastric irritation without any apparent change in tolerance.

The toxic symptoms so far reported are: nausea, most frequent in occurrence and reported by many as usually mild and temporary;^{8,18} vomiting, occasionally severe and requiring withdrawal of the drug; epigastric distress; severe thirst; abdominal pain; toxic jaundice; exfoliative dermatitis; paresthesias and even severe psychotic reactions. A careful search of the literature failed to reveal more than a few isolated instances of these symptoms, if one excludes the first two.

Of the many series of cases so far reported, one of the largest is that of Davis and Boynton,⁶ who, after careful clinical and laboratory observations of 600 patients carried out over a period of nearly two years, observed no evidence of serious toxic reactions. They were of the opinion that the daily consumption of one milligram of the drug orally substitutes to a large measure for the estrogenic role of the ovarian function. In their study they checked the possible deleterious effect upon the liver by histologic, serologic and clinical methods without finding any proof of hepatic involvement, and their results concur with those of Buxton and Engle¹¹ and MacBryde, Freedman and Loeffel.¹⁵ Davis and Boynton⁶ also investigated the effect of the drug on the hematopoietic system and observed that it is certainly not damaged, but that it may be distinctly benefited in some instances. In their large series mild transient nausea was present in but a few cases, and in only two was it necessary to discontinue the drug because of severe vomiting. It was interesting to observe that in these two cases the patients reported that the toxic symptoms were identical with the serious hyperemesis which both had experienced during pregnancy and for which one of them required a therapeutic abortion. In no puerperal case of the series was nausea produced when the drug was administered for the suppression of lactation.

In this paper I wish to report the results obtained in 21 cases in which the patients received stilbestrol therapy for periods of from three weeks to seven months (see tables 1, 2 and 3). The results were rated as excellent when all symptoms were relieved, good when most of the symptoms were relieved and hot flushes had

been reduced to 50 per cent of their previous intensity, fair when a few of the symptoms or all of them were only partially improved, and poor when no relief was obtained.

The main symptom used as a criterion for diagnosis and for estimation of improvement was the hot flush, the only true menopausal symptom. All other symptoms appearing during the menopause may also appear in sundry other conditions, but hot flushes can be considered almost as pathognomonic, and their disappearance under any form of therapy is the best possible index for its effectiveness. All the studies in these cases were made under careful supervision, and detailed laboratory studies as well as vaginal smears were used routinely.

The series included 5 cases of surgical menopause, in all of which there was good or excellent response to adequate doses (see table 1). There were also 11 cases of physiologic menopause (see table 2), 9 of which were rated as excellent and 2 as poor. One of the latter furnished the only instance in this series in which stilbestrol had to be discontinued because of intense toxic reaction. In one of the cases reported as excellent, the patient (R. L., suffering from the menopausal syndrome complicated by diabetes) was nauseated and vomited while taking the drug orally in either plain or enteric-coated tablets, but she could tolerate doses of from 0.1 mg. to 5.0 mg. intramuscularly two or three times a week with no ill effects and with excellent reduction of hot flushes and other menopausal symptoms as well as a considerable degree of improvement in sugar tolerance.

The remaining 5 cases pertained to miscellaneous conditions (see table 3). In one, D.C., a primipara, complained of frigidity, scant and rare menses, obesity, drowsiness and other symptoms. For two weeks while receiving stilbestrol parenterally she reported slightly improved libido and about three weeks after starting on the oral medication, she complained of nausea. This nausea was, however, similar to that experienced during pregnancy. A Friedman test proved her second pregnancy, and stilbestrol was discontinued. She is now about seven months pregnant and is doing well.

In three of these 5 cases (M.N., V.T., and M.F.) the patients complained of dysmenorrhea and other symptoms. All were relieved with doses varying from 1 mg. orally daily to 5 mg. intramuscularly three times a week.

The last case was the only one in which up to this time I have had an opportunity to suppress lactation with stilbestrol. Since women in the puerperal state are immune to the toxicity caused by stilbestrol, this patient was given 5 mg. orally four times daily for four days, or a total of 80 mg. in that time, and no other treatment. On the morning of the fifth day her breasts were dry, and she had experienced no swelling or pain in them at any time.

DISCUSSION

This series of cases is too small to warrant the drawing of any definite conclusions, but after reviewing literature covering over 2,000 cases and with the personal experience obtained from this small series, I believe the following observations seem to be adequate:

1. Stilbestrol is a potent estrogenic substance.

2. This drug can be used orally in most cases, making it the ideal form of estrogenic therapy because of the ease of administration, because it furnishes a physiologic level of estrogenic activity more nearly comparable with that of the active ovary than other synthetic products and because it promises to be much less expensive than the natural estrogens.

3. Toxic reactions to stilbestrol seem to depend mostly upon individual idiosyncrasy, and in no instance have serious anatomic lesions been demonstrated. The toxic reactions consist mainly of nausea, usually of a transient character, and vomiting, which can easily be suppressed by discontinuing the administration of the drug.

4. In the cases coming under my observation stilbestrol was effective in doses as low as 0.1 mg., but the average dose potent enough to suppress hot flushes ranged between 1.0 mg. and 2.0 mg. given orally daily.

5. The estrogenic potency is in direct proportion with the size of the dose, but this factor does not seem to bear any relationship to toxicity. I believe that if toxicity develops in a patient owing to treatment with stilbestrol, it occurs whether the dose is small or large, and that patients who are not sensitive tolerate fairly large doses without ill effects.

At the present time in the Department of Endocrinology and Nutrition my associates and I are continuing the study of these cases, and we are selecting a group of women with menopausal diabetes whose tolerance to stilbestrol is established, to whom we are administering larger

doses up to 5.0 mg. orally daily or from twice to three times weekly intramuscularly, together with 5.0 mg. of synthetic progesterone, in order to study the effect of this treatment upon the sugar tolerance curves and the insulin requirement of these patients. This work is an attempt to parallel the work done by Cantilo¹⁹ of Buenos Aires with natural estrogens and progesterone. In his series of 40 cases of diabetic women he was able to lift all dietary restrictions and discontinue the administration of insulin without recurrence of hyperglycemia and glycosuria after three months of therapy. These results seem to follow a depressant effect of the estrogens upon the diabetogenic hyperactivity of the pituitary abnormally stimulated during the menopause.^{20,21,22} These studies will be the subject of a paper to be published later on.

TABLE 1
STILBESTROL THERAPY
GROUP 1 — SURGICAL MENOPAUSE (5)

Patient	Age	Dosage	Results
R.B.*	36	0.1 mg. intramuscularly twice weekly.	Excellent.
T.Q.*	38	1.0 mg. to 2.5 mg. intramuscularly. 1.0 mg. intramuscularly twice weekly	Excellent effect maintained with 1.0 mg. orally daily after 2 weeks.
E.D.	41	0.1 mg. orally daily. 1.0 mg. orally daily.	Fair. Excellent.
C.M.*	40	1.0 mg. orally daily.	Good.
L.W.	24	1.0 mg. orally daily.	Good.

*Had been under theelin therapy. A placebo was substituted until symptoms recurred, and then stilbestrol therapy was instituted.

TABLE 2
STILBESTROL THERAPY
GROUP 2 — PHYSIOLOGIC MENOPAUSE (11)

Patient	Age	Dosage	Results
N.B.*	50	1.0 mg. orally daily	Excellent.
E.F.*	45	1.0 mg. intramuscularly every 4 days	Nausea, vomiting, severe thirst, dermatitis pruriginosa.
		0.1 mg. orally daily	Nausea, epigastric pain.
		1.0 mg. orally by enteric-coated tablets	Nausea, dizziness, thirst. Therapy discontinued.

*Had been under estrogenic therapy. A placebo was substituted until symptoms recurred and then stilbestrol therapy was instituted.

†Menopausal syndrome complicated by diabetes. Under the higher dosages the requirements for insulin are decreasing and sugar tolerance improving.

Patient	Age	Dosage	Results
A.L.*	50	0.1 mg. orally daily 1.0 mg. orally daily	Good. Excellent, but after 6 weeks there was endometrial stimulation with menses, after amenorrhea for 5 years. Change to methyl testosterone stopped bleeding. Patient now is again on stilbestrol 1.0 mg. daily and is well.
J.D.	39	1.0 mg. orally daily	Excellent with very slight endometrial stimulation and spotting at times. After a month hot flushes began to appear. Patient is now taking 2 mg. daily and is well.
E.L.*	54	0.1 mg. intramuscularly 3 times weekly	This patient with innumerable complaints had not improved under theelin, but improved remarkably after two weeks and then left. After a month she returned worse and did not respond to varied doses of stilbestrol. No toxicity, but poor results.
M.M.*	48	0.1 mg. intramuscularly every other day for 10 days. 0.1 mg. orally daily for 60 days 1.0 mg. orally daily	Fairly good improvement. Continues fair improvement. Excellent.
S.McC.	42	1.0 mg. orally daily 2.0 mg. orally daily	Fair. Excellent.
A.P.	47	1.0 mg. orally daily 2.0 mg. orally daily	Fair. Excellent.
L.S.†	54	1.0 mg. orally daily 2.0 mg. orally daily 5.0 mg. intramuscularly twice weekly	Fair. Good. Excellent.
E.Y.†	50	1.0 mg. orally daily 5.0 mg. twice weekly	Good. Excellent.
R.L.†	50	0.1 mg. intramuscularly twice weekly 1.0 mg. orally daily 5.0 mg. intramuscularly twice weekly	Fairly good. Nausea, vomiting. After 2 weeks on theelin with only slight response the patient was given methyl testosterone 10 mg. orally daily. Hot flushes were reduced from 10 to 3 or 4 daily. Excellent.

TABLE 3
STILBESTROL THERAPY
GROUP 3 — MISCELLANEOUS CONDITIONS (5)

Patient	Age	Indications	Dosage	Results
D.C.	27	Oligomenorrhea Frigidity Obesity Hypothyroidism	0.1 mg. intramuscularly 3 times weekly for 4 weeks. 1.0 mg. orally for 2 weeks.	Improved libido. Nausea. After 6 weeks' treatment Friedman test positive. Continues normal pregnancy.
M.N.	33	Dysmenorrhea Intense gastrointestinal symptoms with no organic findings.	0.1 mg. intramuscularly twice weekly for 2 weeks. 0.1 mg. daily for 2 weeks.	Excellent. Relief maintained for 3 months after ceasing therapy.
V.T.	33	Dysmenorrhea	1.0 mg. daily for 2 weeks. 2.0 mg. daily for 4 weeks. 1.0 mg. daily 5.0 mg. intramuscularly weekly.	Fair. Excellent. Excellent. Maintains excellent response.
M.F.	48	Menorrhagia Dysmenorrhea	1.0 mg. daily for three months.	Excellent. Menses lasting for from 15 to 20 days reduced to 8 or 9 with no pains.
C.F.	22	Suppression of Lactation	5.0 mg. orally three times daily for 4 days	Excellent. Lactation suppressed in 4 days without pain or engorgement of breasts.

METHYL TESTOSTERONE THERAPY*

The androgenic potency of testosterone propionate administered subcutaneously in oil is already a classic fact too well known to merit repetition. The expense of this method of administration with the inconvenience of repeated injections made it desirable, however, that another form of therapy be found to make this drug available to a greater number of patients who need it.

In 1938, Moore, Lamar and Beck²³ demonstrated that testosterone and its propionate ester are readily absorbed through the skin with effects similar to those of subcutaneous injections. Their work, followed by many other investigations led to the widespread use of testosterone propionate in ointment form. This method of administration is limited because not more than 2 mg. of the drug can be concentrated per gram of ointment, and the messy and tedious application of several grams of ointment is disagreeable even to eunuchoids anxious to obtain sexual stimulation. Today it is considered useful as a form of maintenance therapy when the required doses are not too high.

Deanesly and Parkes²⁴ in 1937 were the first to use pure androgens and estrogens by subcutan-

eous implantation of crystals or pellets with stronger and longer effect than similar doses given by injection. Vest and Howard²⁵ reported in 1939 the first efficient method of testosterone implantation in large doses with good results in two eunuchoids.

Encouraged by the good results reported last June at the annual meeting of the Association for the Study of Internal Secretions by Biskind and his associates^{26,27} and through the courtesy of Dr. Max Gilbert of the Research Division of Schering Corporation, who supplied the material, I implanted pure testosterone in pellets of 75 mg. each (received enclosed in sterilized ampules) under the skin of the thigh of 2 patients.

E.B., aged 28, had at the age of 14 suffered mumps with severe orchitis and subsequent atrophy of the right testicle, which was the size of a bean. The left testicle did not exhibit the usual vicarious hypertrophy and was of rather small size and very soft. The penis measured 3 inches in length and less than 3 inches in circumference. The prostate was almost imperceptible. The patient's height was 67½ inches with lower segment 35½ inches and span 69 inches, and his weight was 185 pounds. Gynecomastia and female distribution of hair were present. The patient had never desired relationship with the opposite sex and was extremely shy to the point of making the examination a test for the patience of the examiner, but he was finally persuaded to submit to it when promised that somehow he

*This work is being made possible by generous supplies of Methyl Testosterone tablets furnished by the Medical Research Departments of Ciba Pharmaceutical Products, Inc., Roche-Organon, Inc., and Schering Corporation.

would receive relief. In November 1939 4 pellets were deposited into the fat of the internal aspect of the left thigh, a total of 300 mg., through a small incision about 1 inch long and 1 inch deep. The wound was closed with three metal clips and it healed by first intention in from five to seven days.

In about two weeks the patient reported erections and nocturnal emissions for the first time in his life as far as he could remember. He was then given a diet for the reduction of weight and lost 22 pounds in two months, during which time he became what he himself called a "he-man," dating girls frequently. The last time I saw him in February 1940 he was getting ready to marry. The size of the penis had increased to 5 inches in length and $3\frac{3}{4}$ inches in circumference, and the large breasts had considerably decreased in size. I do not know how long the effect of this implantation will remain. Unfortunately this patient disappeared from my supervision some two months ago, and I am making efforts to regain contact with him. I do not doubt that as soon as the effect of the implantation wears out, he will come back to me for further treatment.

The second eunuchoid was treated in a similar manner, but the wound became infected, and the pellets were expelled with the pus. Although the patient reported frequent erections during the time that the wound was being treated, both he and I became discouraged with the method and decided to resort to the subcutaneous injections of testosterone propionate. These experiences, though limited, leave the desire for another form of administration by which both the cost and the danger of undesirable complications could be safely reduced.

In 1938 Miescher and Tschopp²⁸ and Emmens and Parkes²⁹ began experimenting with methyl testosterone administered orally to animals. Previous work with pure testosterone and testosterone propionate given orally demonstrated that these products lose almost all of their effect in the gastrointestinal tract. Their experiments demonstrated that methyl testosterone retains all of its potency when given by mouth. In 1939 Foss,³⁰ in Bristol, England, reported the first cases in which successful methyl testosterone therapy was employed orally. These first 6 cases included a postpubertal eunuch, 2 young boys with hypogonadism and 3 women with dysmen-

orrhea. In the first 3 cases the effective dose was from 30 mg. to 50 mg. daily and in the cases of the 3 women the dysmenorrhea was relieved with 10 mg. daily taken at the middle of the menstrual cycle. Others reported similar results.^{31,32}

At the annual meeting of the American Medical Association in June 1940 Kearns³³ presented a complete study of 8 patients, 3 castrates and 5 eunuchoids, in whom he compared the effects of the oral administration of methyl testosterone with those of the parenteral injection and intrunction of testosterone propionate and subcutaneous implantation of pellets of pure testosterone. His conclusions were that if the cost of the drug could be brought within reason the oral administration of methyl testosterone would probably be the method of choice. He used doses as high as 100 mg. a day in some cases and he considered the average dose to be 40 mg. daily.

The method has been in general use in Europe for some time. Several reports of its use in this country have been unanimous regarding the potency and the lack of toxicity of methyl testosterone.

This preliminary report is based on the study of 37 patients, 26 men, 4 boys and 7 women, who received methyl testosterone therapy orally for varying periods of time. The first group in this series consisted of 10 cases of hypogonadism of the Fröhlich type; the patients in these cases included 4 boys varying in age from 9 to 13 and 6 adults. All of these cases were carefully studied both from the standpoint of history, physical examination and laboratory studies. The diagnosis was mainly based upon delayed development of secondary sex characteristics, insufficient development of the psychologic and mental attitude of the male, in most instances together with obesity of the adiposogenital type. It would be impossible to enter into the details of each individual case in this paper. The ages of the patients, the types of disorder and the results of the treatment are simply related in the accompanying tables (see tables 4 to 9 inclusive).

Special remarks are in order regarding the male patients experiencing the climacteric. There are some who deny the existence of the syndrome of the male climacteric because of the fact that there is no menopause in men. It is a well known fact that the only true menopausal or

climacteric symptom is the hot flush. Many other neurovegetative disturbances accompany the hot flushes in women during the menopausal syndrome, but hot flushes are conclusive. Both the hot flushes and all the other neurovegetative dystonias occur in men suffering the climacteric syndrome. The only real difference between the male and female climacteric is the absence in the former of the objective fact of the menses and their disappearance during that period so characteristically called "change of life." To deny that man undergoes the typical phenomena of the climacteric because he does not menstruate and because subsequently there is no menopause would be like denying that he goes through puberty because he has never started to menstruate.

As in estimating the results of stilbestrol therapy in the menopausal syndrome, I used mostly the hot flushes as a barometer for the results obtained in the cases of the male climacteric. These results are evaluated in tables (see tables 6 and 7) in the same manner as those of stilbestrol therapy.

Miscellaneous conditions related to the climacteric, but subject to discussion, were included in group 4 (see table 7). Since methyl testosterone is a new form of therapy with no toxic manifestations whatsoever so far reported, I thought it justifiable to try it in these cases in which there might be a possibility of good results. As shown in table 7, only in one instance was it impossible to detect sufficient improvement to justify the continuation of the treatment after the first few days. The most remarkable improvement was obtained in the cases in which the nocturia of benign prostatic hypertrophy and diabetes were associated conditions. The results obtained in the cases of diabetes were so encouraging that a group of male patients suffering from climacteric diabetes was selected to receive methyl testosterone therapy during a period of at least three months in order that the effect of this therapy upon their sugar tolerance and requirements of insulin might be investigated. It is too early yet to arrive at a conclusion, but in the few cases actually under treatment a definite reduction in the requirement of insulin appears to have been obtained. In two of the cases the patients, who were receiving from 20 to 30 units of protamine zinc insulin daily, are now receiving no insulin and on the same diet as

previously are free of hyperglycemia and have a remarkably increased glucose tolerance.

In the case of the women patients the best indication for methyl testosterone as a substitute for estrogenic therapy occurs in cases of endometrial stimulation produced during the treatment of the menopausal syndrome. Menstrual bleeding disappears, and it is possible for all the symptoms of the menopause to remain under the same perfect control as when therapy with stilbestrol or natural estrogen is employed. Certain types of dysmenorrhea also respond well to methyl testosterone therapy. In 2 of the 3 cases of metropathia hemorrhagica treated so far there was excellent response to this therapy, but in one it was a failure.

DISCUSSION

These cases are presented not for the purpose of drawing a definite conclusion because the series is too small for that, but with the idea in mind of offering another contribution to the knowledge of a drug that I feel will in the near future occupy an important place in the therapeutic armamentarium. There is much work to be done yet before definite data can be established regarding the indications for androgenic substances. Another important point is in regard to dosage. I believe that most of the dosages reported in the literature are entirely too high. At the same time I believe that the oral use of methyl testosterone alone might be insufficient in the treatment of certain conditions. In cases in which there is a testicular insufficiency of long standing with the production of symptoms of the male climacteric or those simulating it, I prefer to start treatment with a few injections of testosterone propionate, to be followed, after sufficient clinical improvement has been reported by the patient, with a maintenance dose of methyl testosterone. This maintenance dose usually ranges between 10 and 30 mg. a day and is given orally; rarely is it necessary to administer from 30 to 40 mg. daily. It is my impression that the higher dosages might be required in the treatment of such conditions as diabetes, coronary disease, peripheral vascular disease and other diseases commonly associated with the process of aging. When sexual stimulation is the main feature, the smaller doses seem to give much better results.

The dangers of the possible widespread use of methyl testosterone for obtaining increased sex-

TABLE 4
METHYL TESTOSTERONE THERAPY

Indication		Patient	Age	Results	
				<u>Mentally</u>	<u>Anatomicophysiology</u>
GROUP 1 Hypogonadism Fröhlich's Type (10)	Prepuberal (4)	D.O.*	9	Excellent	Excellent
		B.S.*	11	Excellent	Excellent
		N.S.	11	Excellent	Excellent
		W.P.	13	Excellent	Excellent
	Adult (6)	P.C.†	34	Excellent	Excellent
		H.K.	36	Excellent	Good
		F.H.	39	Good	Fair
		N.S.	47	Fair	None
		N.S.	47	Good	None
		H.S.	54	Slight	None

*These two cases were previously corrected of cryptorchidism by the administration of anterior pituitary-like hormone, but the secondary sex characteristics developed much better under methyl testosterone therapy.

†This patient was the only one reporting what might be considered a toxic reaction. Tachycardia and palpitation are always present while the drug is being administered, but disappear as soon as it is discontinued. Short periods of treatment interspersed with periods of rest seemed to solve the problem in this case.

ual stimulation in normal men are, I believe, much overrated. I base this belief on the fact that the administration of methyl testosterone or any other androgenic substance to persons who do not suffer from testicular insufficiency, does not increase libido or sexual potency at all, but on the contrary produces a definite depression of sexual desire. It is true that there is an effect similar to the withdrawal effect of estrogenic substances with an increase in libido and potency after the withdrawal of methyl testosterone, but this effect does not begin soon enough to satisfy the curiosity of laymen who would attempt to take the drug in order to stimulate an abnormal increase in their sexual powers. Nevertheless, the sale of androgenic preparations should be restricted to physicians' prescriptions in order to avoid possible abuse. As with any other form of intelligent medication, the indications, dosage and administration of an androgenic substance should be the subject of careful personal study and consideration for every individual case.

SUMMARY

A report is presented of estrogenic therapy with stilbestrol and androgenic therapy with methyl testosterone together with a review of the literature pertaining to these synthetic substances. The results of treatment in two series of cases are discussed; in one, 21 women were

TABLE 5
METHYL TESTOSTERONE THERAPY

	Patient	Age	Results
GROUP 2 Sexual Impotence (with no important findings otherwise) (4)	E.T.	22	Excellent
	E.B.	28	Excellent
	R.P.	29	Poor
	C.R.	44	Good

TABLE 6
METHYL TESTOSTERONE THERAPY

Indication	Patient	Age	Results
GROUP 3 MALE CLIMACTERIC (Syndrome is analogous to the menopausal syndrome in women: hot flushes, irritability, nervousness, insomnia, inability to concentrate, mental de- pression, hypertension, de- creased libido and po- tency, nocturia.) (6)	J.G.*	43	Excellent
	J.L.	45	Excellent
	D.D.	48	Good
	B.S.	53	Excellent
	S.A.	56	Excellent
	J.R.†	58	Poor

*History of gonorrhea, prostatic abscess, orchitis.

†A considerable degree of psychoneurosis.

treated with stilbestrol, and in the other 26 men, 4 boys and 7 women were treated with methyl testosterone.

Methyl testosterone seems to cause toxicity rarely, if at all. Stilbestrol, however, seems to produce a type of toxic reaction which apparently depends mostly on the idiosyncrasy of the individual patient, and it is in no case of a sufficient degree of severity to cause the drug to be considered dangerous.

TABLE 7
METHYL TESTOSTERONE THERAPY

	Patient	Age	Complication	Results
GROUP 4 MALE CLIMACTERIC and POST- CLIMACTERIC with miscellane- ous complications. (7)	A.F.	50	Peripheral vascular disease	Excellent
	J.T.	51	Diabetes and coronary disease	Excellent
	M.R.	60	Benign prostatic hypertrophy	Good
	B.W.	65	Diabetes	Good
	H.T.	69	Diabetes, hypertension, arterio- sclerosis	Fair
	H.F.	72	Hypertension, None myocardial damage, minimal pulmonary tuberculosis	None
	J.L.	73	Benign prostatic hypertrophy	Good

TABLE 8
METHYL TESTOSTERONE THERAPY

	Patient	Age	Results
GROUP 5 Normal Young Adult Males (3)			Uniform reports:
	R.A.	34	(a) decreased libido while under higher dosages (25 mg. daily).
	P.L.	35	(b) libido normalized under lower dosages (10 mg. daily).
	P.M.	36	(c) libido increased for several weeks after discontinuing the drug.

In all of these cases the same amounts were used: 25 mg. daily for one week, 10 mg. daily for two weeks.

TABLE 9
METHYL TESTOSTERONE THERAPY
Group 6 — Women with Menstrual Disorders (7)

Patient	Age	Diagnosis	Results
I.C.	21	Menorrhagia with bleeding constant for several months	Poor. (Cramps produced with con- tinued flow after treatment for 5 days with 25 mg. daily).
H.P.	28	Menorrhagia with bleeding contin- uously for several months	Apparently good: 10 mg. daily for 1 week: bleeding 20 mg. daily for 1 week: bleeding 80 mg. daily for 8 days: stops bleed- ing 10 mg. daily: after 2 weeks the patient seemed to maintain improvement.
E.D.	34	Menopausal syn- drome with swell- ing and pain in breasts, which do not respond to theelin in doses up to 10,000 I. U. 3 times weekly	After 8 injections of testosterone pro- pionate (25 mg. was given daily and then 3 times week- ly) all symptoms disappeared and improvement was maintained with 10 mg. of methyl tes- tosterone given or- ally daily.
E.B.	25	Dysmenorrhea Dyspareunia	After initial treat- ment with testos- terone propionate administered intra- muscularly, excel- lent results were maintained with methyl testoster- one 10 mg. once or twice daily for 3 or 4 days prior to onset of menses.
M.F.	49	Menorrhagia since onset of menses at age of 12	Excellent results with 100 mg. of methyl testosterone daily for a week, then 25 mg. daily for 3 weeks. Re- sults sustained af- ter 6 months.
E.F.	45	Menopausal syn- drome with in- tense reaction to stilbestrol and poor response to theelin.	Excellent allevia- tion of all symp- toms, but exagger- ated libido with the higher dosages. Im- provement well sus- tained on 10 mg. given orally 3 to 5 days a week.
A.L.	49	Menopausal syn- drome with endo- metrial stimula- tion from theelin.	Excellent results with only 200 mg. in 2 weeks. Later on this patient was put on stilbestrol and now maintains a good response to 1 mg. daily.

Stilbestrol is a potent estrogenic substance with definite indications in the treatment of syndromes of hypoestrinism.

Methyl testosterone is a potent androgenic substance with definite indications in the treatment of testicular insufficiency.

Both drugs can be administered orally, thereby greatly simplifying the treatment of these conditions.

Clinical investigation with both drugs should be continued so as to give the medical profession a thorough knowledge of their therapeutic properties.

REFERENCES

1. Mazer, C.; Israel, S. L., and Ravetz, E.: Synthetic Estrogen Stilbestrol; Experimental and Clinical Evaluation, *J.A.M.A.* **116**: 675-681 (Feb. 22) 1941.
2. Dodds, E. C. and Lawson, W.: Simple Aromatic Oestrogenic Agent with Activity of Same Order as that of Oestrone, *Nature, London* **139**: 627-628 (Apr. 10), 1937.
3. Bishop, P. M. F.; Boycott, M., and Zuckerman, S.: Oestrogenic Properties of "Stilboestrol" (diethylstilboestrol); Clinical and Experimental Investigation, *Lancet* **1**: 5-11 (Jan. 7) 1939.
4. Weinstein, B. B.; Weed, J. C.; Lock, F. R., and Collins, C. G.: Oral Administration of Diethyl Stilbestrol Dipropionate, *Endocrinology* **27**: 739-742 (Nov.) 1940.
5. White, P., and Hunt, H.: Prediction and Prevention of Pregnancy Accidents in Diabetes, *J.A.M.A.* **24**: 2039-2040 (Dec. 14) 1940.
6. Dunn, C. W.: Stilbestrol-Induced Gynecomastia in Male, *J.A.M.A.* **115**: 2263-2264 (Dec. 28) 1940.
7. Greenblatt, R. B.; Torpin, R., and Brown, W. R.: Diethylstilbestrol; Clinical Evaluation of Various Modes of Administration, *South. M. J.* **33**: 1276-1285 (Dec.) 1940.
8. Davis, M. E., and Boynton, W. M.: Indications, Clinical Use and Toxicity of 4-4' Dihydrodiethyl Stilbene, *J. Clin. Endocrinol.* **1**: 339-345 (April) 1941.
9. von Haam, E.; Hammel, M. A.; Rardin, T. E., and Schoene, R. H.: Experimental Studies on Activity and Toxicity of Stilbestrol, *Endocrinology* **28**: 263-273 (Feb.) 1941.
10. Atkinson, D. W.: Review of Experimental and Clinical Trials of Stilbestrol, *Endocrinology* **27**: 161-165 (Aug.) 1940.
11. Burdick, H. O., and Vedder, H.: Effect of Stilbestrol in Early Pregnancy, *Endocrinology* **28**: 629-633 (Apr.) 1941.
12. Soule, S. D., and Bortnick, A. R.: Stilbestrol, Clinical Study in Estrogenic Therapy, *J. Clin. Endocrinol.* **1**: 53-57 (Jan.) 1941.
13. Shorr, E.; Robinson, F. H., and Papanicolaou, G. N.: Clinical Study of Synthetic Estrogen Stilbestrol, *J.A.M.A.* **113**: 2312-2318 (Dec. 23) 1939.
14. Buxton, C. L., and Engle, E. T.: Effects of Therapeutic Use of Diethylstilbestrol, *J.A.M.A.* **113**: 2318-2320 (Dec. 23) 1939.
15. MacBryde, C. M.; Freedman, H. and Loeffel, E.: Studies on Stilbestrol; Preliminary Statement, *J.A.M.A.* **113**: 2320 (Dec. 23) 1939.
16. Steinberg, A.: Endocr. Research Inst. Philadelphia, Personal Communication.
17. Randall, L. M.: in discussion on Mazer, C.; Israel, S. L., and Ravetz, E., *J.A.M.A.* **116**: 681, 1941.
18. Everett, H. S., and Bennett, H. G., Jr.: Use of Diethylstilbestrol in Treatment of Menopausal Syndrome, *South. M. J.* **33**: 1290-1292 (Dec.) 1940.
19. Cantilo, E.: Successful Response in Diabetes Mellitus of Menopause Produced by Antagonistic Action of Sex Hormones on Pituitary Activity, *Endocrinology* **28**: 20-24 (Jan.) 1941.
20. Spiegelman, A. R.: Influence of Estrogen on Insulin Requirement of the Diabetic, *Proc. Soc. Exper. Biol. & Med.* **43**: 307-308 (Feb.) 1940.
21. Mazer, C.; Meranze, D. R., and Israel, S. L.: Evaluation of Constitutional Effects of Large Doses of Estrogenic Principle, *J.A.M.A.* **105**: 257-263 (July 27) 1935.
22. Lamar, C. P.: Diabetes, the Menopause and Sex Hormones, *Bull. Dade County Med. Assn.* **11**: 7-8 (Feb.) 1941.
23. Moore, C. R.; Lamar, J. K., and Beck, N.: Cutaneous Absorption of Sex Hormones, *J.A.M.A.* **111**: 11-14 (July 2) 1938.
24. Deanesly, R., and Parkes, A. S.: Factors Influencing Effectiveness of Administered Hormones, *Proc. Roy. Soc., London, s.B* **124**: 279-298 (Dec. 7) 1937.
25. Vest, S. A., and Howard, J. E.: Clinical Experiments with Androgens, Method of Implantation of Crystalline Testosterone, *J.A.M.A.* **113**: 1869-1872 (Nov. 18) 1939.
26. Biskind, G. R.; Escamilla, R. F., and Lisser, H.: Implantation of Testosterone Compound in Cases of Male Eunuchoidism, *J. Clin. Endocrinol.* **1**: 38-49 (Jan.) 1941.
27. Biskind, G. R., and Meyer, M. A.: Comparative Androgenic Potency of Testosterone, Methyl Testosterone and Testosterone Propionate Administered in Pellet Form, *Endocrinology* **28**: 217-221 (Feb.) 1941.
28. Miescher, K., and Tschopp, E.: Ueber Orale Wirksamkeit Männlicher Sexualhormone; Vorläufige Mitteilung, *Schweiz. med. Wchnschr.* **68**: 1258 (Nov. 12) 1938.
29. Emmens, C. W., and Parkes, A. S.: Effect of Routine of Administration on Multiple Activities of Testosterone and Methyl Testosterone in Different Species, *J. Endocrinol.* **1**: 323-331 (Nov.) 1939.
30. Foss, G. L.: Oral Application of Methyl Testosterone and its Simplification of Androgen Therapy, *Brit. M. J.* **2**: 11-12 (July 1) 1939.
31. Tager, B. N., and Shelton, E. K.: Therapy in Male Hypogonadism; Testosterone Propionate Inunction and Methyl Testosterone Orally. Case Report, *J. Clin. Endocrinol.* **1**: 131-133 (Feb) 1941.
32. Byron, C. S., and Katzen, P.: Male Hypogonadism; Clinical Effect of Oral Use of Methyl Testosterone in Eunuchoidism, *J. of Clin. Endocrinol.* **1**: 359 (Apr.) 1941.
33. Kearns, W. M.: Oral Therapy of Testicular Deficiency: Methyl Testosterone Administered Orally to Patients with Marked Testicular Deficiency, *J. Clin. Endocrinol.* **1**: 126 (Feb.) 1941.

DISCUSSION

DR. GEORGE A. MITCHELL, Miami: I wish to commend Dr. Lamar highly on the thoroughness with which he has reviewed the literature on the use of stilbestrol and on the interesting report of cases that he has presented.

Stilbestrol's greatest value in gynecology has been in the treatment of the menopause, whether spontaneous or artificial. Its oral use has proved as effective as the hypodermic use of the natural estrogens. In the treatment of primary dysmenorrhea its value is apparently limited to those cases with a hypoplastic or infantile uterus wherein the aim of the treatment is to increase the size of the uterus. It is used in certain menstrual irregularities in the first part of the cycle to prime the endometrium for other hormonal actions.

Dr. Lamar has mentioned its use in certain obstetric conditions. I have found it useful in preventing lactation, if given intramuscularly even in the small dosage of 5 mg. a day on the second, third and fourth post partum days. The action here, of course, is to inhibit the secretion of prolactin, which normally makes its appearance about the second postpartum day.

Its use in the treatment of the toxemia of pregnancy in diabetic patients has been mentioned. I have used it in a small series of cases of preeclampsia and eclampsia. Here it is employed on the theoretic basis of inhibition of the pituitary and it has been proved of value in lowering the blood pressure. Whereas in the other toxemias of pregnancy, owing to low reserve kidney, chronic nephritis, essential hypertension and hyperthyroidism, it has been of no value.

I heartily agree with Dr. Lamar that stilbestrol has proved that it is efficient and safe in the treatment of certain endocrine disorders and that it definitely has its value along with the other synthetic hormonal substances.

DR. JAMES J. NUGENT, Miami: I believe that the members of the Association have just heard a most important paper. Methyl testosterone will probably revolutionize the treatment of the male climacteric syndrome.

I want to call attention to the male climacteric. There seems to be very little recognition of it. We notice cases that are severe, but there are many cases that have only a few symptoms. We all know of the widespread cases of men sowing their wild oats for the last time. We find men between the ages of 40 and 60 who have held responsible positions all of their lives, and then something happens. They do not work as they did before. When their cases are analyzed many of these patients show symptoms of the male climacteric.

I cannot quite agree with Dr. Lamar on the diagnosis of the male climacteric as being mostly a chain of circulatory symptoms, because there are many other symptoms of this syndrome. Among the most prominent symptoms are disturbances related to the lower portion of the urinary tract, according to the observation of most urologists. Some patients have nocturia; some have a feeling of discomfort on emptying the bladder. These symptoms seem to be more frequent than the symptom of hot flushes. These patients may not have hot flushes and yet have very definite symptoms of the male climacteric. Hot flushes are a late rather than an early symptom.

I should like to give you what I think are the symptoms, in about the order of their importance, that should be looked for in the male climacteric. If looked for, they will be noted much more often than they are at present. Probably the most frequent symptom is some kind of disturbance in the neck of the bladder. There may be frequency, maybe a little burning, or possibly a hesitancy in starting the flow on urination. There may be nocturia. Sometimes there is no frequency in the daytime, but frequency at night. There often is a considerable degree of fatigue and emotionalism. It is possible to relieve the fatigue and materially help the patient in these hypogonadal cases. Often it requires little of the drug, just from 5 to 10 mg. by mouth once a day, for relief of the symptoms. Relief, however, does

not come immediately, frequently taking a month or so. Treatment should be continued for some time.

Fatigue, hot flushes, nocturia, decrease in libido, some degree of emotionalism and voiding with difficulty are definite indications of the male climacteric. That period may be anywhere from 40 to 55 or 60 years of age. I mention this syndrome so that it will be looked for more frequently.

DR. CARLOS P. LAMAR, Miami (concluding): Because of the limited time I did not go extensively into a description of the male climacteric syndrome and I am grateful to Dr. Nugent for stressing it in his discussion.

One important action of estrogenic and androgenic preparations, which I did not mention due to lack of time, is the great influence upon the type of diabetes which appears during the menopause in women and during the climacteric period in men. For over a year my associates and I have treated a large number of diabetic patients in our clinic and have been noticing that the women at the menopausal period who were put under stilbestrol therapy showed an increased sugar tolerance and decreased requirement of insulin. We were investigating this remarkable fact when about five months ago a paper was published in "Endocrinology" by Cantilo of Buenos Aires. In it he reported a series of 40 cases in which diabetic women experiencing the menopause were treated during a period of three months with high doses of estrin and progesterone. During this period they were not given insulin and were not under dietary restrictions. Three months after the treatment their sugar tolerance was normal. They were all of the typical diabetic type before this therapy was given. This report coincides with the observations at our clinic. At the present time we have selected a group of 10 diabetic women in whom the onset of diabetes was concurrent with the menopause, and a group of men in whom diabetes developed during the climacteric, and are giving them large doses of stilbestrol and progesterone or methyl testosterone in an effort to investigate the effect of these gonadal substances upon the diabetes. One interpretation is that diabetes develops in these patients owing to the pituitary hyperactivity which was checked during the active sexual life.

We believe that this type of menopausal diabetes will respond to intensive estrogenic and androgenic therapy. Time will tell.

WARNS OF DANGERS IN ADMINISTERING SULFANILAMIDE DURING PREGNANCY

The administration of sulfanilamide during pregnancy is not without danger to the baby because of the rapidly attained similarity of levels of the drug in the blood of the mother and the fetus, George P. Heckel, M.D., Rochester, N. Y., reports in *The Journal of the American Medical Association* for October 18.

This warning is based on the findings in 13 mothers who received sulfanilamide or its derivatives during pregnancy. A severe anemia in the infant of 1 of them at birth suggests fetal injury from sulfanilamide, the author states. Unless, however, an infant is unusually sensitive to sulfanilamide there is little likelihood of any injury from the amounts of the drug obtained in the milk of the mother.

PREVENTRICULOSIS

REPORT OF A CASE

C. J. HEINBERG, M.D.

PENSACOLA

A review of the literature on dilations of the esophagus above a constriction, occurring in the lower third portion, presents a diversity of nomenclature. Known generally by the old name of cardiospasm, this entity is called by many other terms, including phrenospasm, preventriculosis, hiatal esophagismus, achalasia of the esophagus or cardia, megaesophagus or megaloesophagus and idiopathic or diffuse dilation of the esophagus. All of these terms indicate the same pathologic condition and merely represent efforts to indicate etiology through terminology.

Bailey and Jones¹ stated that the first case of cardiospasm was reported in 1672 by Thomas Willis, who described a typical example and its treatment by means of an improved whalebone bougie. According to these authors Hoffman published a paper in 1733 on spastic conditions of the lower end of the esophagus, and by 1904 Mikulicz had collected from the literature reports of 100 cases. Since then cases have been far more numerous, and in 1921 Plummer and Vinson² reported a total of 301 cases at the Mayo Clinic. Since that time many others have been reported. One can, therefore, readily see that this condition is prevalent, and yet it can easily be, and often is, overlooked. Too frequently, when recognized, it is treated symptomatically with sedatives or antispasmodics with results most discouraging, probably because of the term cardiospasm and the direction of treatment to all that the name implies. Jackson and Jackson³ stated that cardiospasm is a misnomer as the term implies conditions which do not exist. They added that the obstruction is not at the cardia and is not spasmodic. Megaesophagus refers only to the secondary dilation. Preventriculosis, meaning disease ahead of the stomach, seems anatomically correct and not provocative of controversy. Because this term appears to be best suited for all practical purposes and for the case herewith presented, I have chosen it in preference to the others mentioned.

Preventriculosis, according to Jackson and Jackson,³ is a morbid condition in which obstruc-

tion at the lower end prevents the esophagus from emptying itself promptly. The resulting stagnation produces dilation of the supradiaphragmatic esophagus and secondary changes in its mucosa.

ETIOLOGY

The exact cause of preventriculosis is not known as the various names for the conditions suggest. Von Mikulicz, cited by Bailey and Jones,¹ considered that it resulted from a spasm of the cardiac sphincter and named the condition cardiospasm. This theory and designation have been accepted for years. Hurst,⁴ in 1913, demonstrated that a mercury-filled tube would pass into the stomach through an apparently spastic sphincter without meeting any appreciable resistance. Fluoroscopic examination reveals a failure of the cardia to open. Hurst,⁴ Mosher⁵ and others demonstrated the absence of ganglion cells in Auerbach's plexus in the lower third section of the esophagus and ascribed the reason for the failure of the cardia to open to the lack of impulses transmitted to this area.

As described by Jackson and Jackson,³ there are two types of cases. In one, the diaphragmatic pinchcock opens with the normal amount of delay when the esophagoscope is brought to bear at the right place, and the tube passes into the stomach without further delay, demonstrating a full normal lumen. There are also the cases of dysfunction. Organic disease, if it exists, is in the nerve cells that fail to coordinate the relaxation of the pinchcock at the approach of the bolus. In some cases there is organic obstruction to the passage of the esophagoscope; this may be fibrous stricture, a web, or a compression of the abdominal esophagus. It is certain that the syndrome usually called cardiospasm probably covers a number of morbid conditions, some functional, others organic, but none of them occurring at the cardia. The esophagoscope demonstrated that, in the absence of a true sphincteric muscular arrangement at the cardiac orifice of the esophagus, its functional closure occurs at the diaphragmatic level and that it is brought about by a definite pinching mechanism consisting of the crura of the diaphragm. This musculature is so constructed as to form an arrangement like double shears, which these authors call the diaphragmatic pinchcock.

It seems to me that since many of these cases present a concomitant enteroptosis, especially a

Read before the Sixty-Eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, Apr. 28, 29 and 30, 1941.

gastroptosis, it can be readily understood that when a stomach drops into the pelvis, stretching of the esophagus must occur with a thinning of the musculature. The diaphragmatic pinchcock offers the same resistance to a weakened muscular wall, and thus more resistance to the passage of food is offered. The bolus remains above the diaphragm, and a secondary esophagitis develops, adding insult to injury as far as the esophagus is concerned, for as more and more pressure by means of food from above is brought on this area, megaloesophagus results with increasing retention and regurgitation. This action of the diaphragmatic pinchcock was impressively demonstrated in the fluoroscopic studies of the case presented. When the affected area of the esophagus was filled with barium, the pinchcock was seen at the diaphragm. On deep inspiration it opened, and the barium flowed into the stomach freely. This action should normally occur in the cycle of deglutition, but is absent in preventriculosis. Jackson and Jackson³ mentioned that the storing of food in the dilated portion, which slowly trickles into the stomach, strongly resembles the ingluvies of birds and suggests reestablishment of atavistic nerve paths, but, phylogenetically, birds are very early. The erect posture, however, is very late, which supports Mosher's² views as to hepatic factors.

It may be mentioned that the sac of preventriculosis may become greatly distended. Its capacity may be as much as 2 liters, and it may hold more than the atonic stomach at times.

Histologic studies of the cardiac orifice in cases of preventriculosis are reported infrequently in the literature. The tissues examined showed anatomic change. In the constricted area there were dense fibrous tissue associated with evidences of reaction, infiltration of round cells and in some cases ulcer. Above the constriction in the sacculated area there was a variable musculature, thinned or hypertrophic. The epithelium is often hyperplastic and may even be leukoplakic, conditions which, with the rugous hyperplasia of the musculature, suggests the wall of the bladder in enlargement of the prostate. Microscopically the mucosa is usually white, pasty and macerated, owing to secondary changes. Mosher⁵ demonstrated that hepatic abnormalities, a web, and other organic lesions may simulate the disease called cardiospasm.

SYMPTOMS

The symptoms of preventriculosis⁴ vary and depend on such factors as the type, degree and duration of the pathologic condition. Early in the course of the disease substernal fullness and pressure, eructation of gas and prompt regurgitation of food are present. As the secondary esophagitis occurs, the feeling of dull pain may be present in the epigastrium. When there is sufficient dilatation and the acute symptoms have subsided, there may be merely the sensation of slight epigastric fullness, and regurgitation may occur only after an accumulation of several days. Loss of weight is not necessarily great as trickling of food into the stomach occurs, and the patient soon learns which foods pass easily into the stomach and which foods remain and are regurgitated. Cellulose materials such as lettuce, celery and other roughage foods are almost always retained and given up. Plummer and Vinson² made three classifications according to symptoms: first, without regurgitation of food; second, with immediate regurgitation and third, with dilation of the esophagus and regurgitation only at long and irregular intervals.

DIAGNOSIS

The diagnosis is usually made by roentgen studies and esophagoscopy. When a fluoroscopic examination is made on a patient with symptoms of preventriculosis, the barium outlines an obstruction at the phrenic hiatus. Esophagoscopy reveals a constriction with macerated white mucosa which yields easily, allowing the esophagoscope to pass into the stomach. It is necessary differentially to rule out stricture from trauma, escharotics, web, carcinoma, ulcer and foreign bodies.

TREATMENT

The treatment is by dilatation; antispasmodics and other medical therapy are of little or no avail. Dilatation is accomplished by means of bouginage. The instrument commonly used for this purpose is the Plummer dilator consisting of a whalebone staff with dilators of various sizes which can be attached to the flexible end of the staff. A string attached to a lead shot is swallowed by the patient previous to bouginage and acts as a guide to the flexible tip through which it passes. With the string drawn taut there is little danger of perforating the thin wall of the dilated esophagus, and the bougie is directed into the tract of the constricted area. It is my

policy to do the first bouginage under the fluoroscope to be sure the flexible portion reaches the stomach. After the size 44 sound can be easily passed, the patient is given a Hurst mercury tube with which to keep the cardia dilated at home. It is easily passed by the patient to dilate the constriction. Various bags with air and mercury to complete the dilation have been devised and are used by many practitioners to dilate these constrictions.

Many authors have reported surgical operations for the relief of preventriculosis ranging from manual dilatation to cardioplasty. It is estimated that 75 per cent of the cases will respond to dilatation, and surgery offers the only relief to the remaining 25 per cent.

REPORT OF CASE

Mrs. B. J., a white woman aged 23, complained of dysphagia and regurgitation of food when examined on Nov. 4, 1940. Three years previously she had first noticed that occasionally swallowing was difficult. Since then she had experienced epigastric pain, dull in character, but sharp at times. At intervals, varying in length, she would have pain from the waist up, even in the teeth. During this period food was regurgitated immediately and sometimes several hours after eating. Regurgitation occurred about once weekly at first, but became progressively worse until after nine months all food was regurgitated about two or three hours after eating. She discovered that cooked foods passed into the stomach, but that all raw foods "came back." A non-productive cough developed after one year, occurring when she was lying down. She lost about 15 pounds in weight, but after she had learned about diet, she regained 10 pounds. There was no history of ingestion of escharotics or of a foreign body, nor was there other relevant information.

Examination of the eyes, ears and upper part of the respiratory tract gave negative results.

ESOPHAGOSCOPY

The esophagoscope was easily passed without the use of an anesthetic. There was no cricopharyngeal stenosis. The mucosa of the upper portion of the esophagus appeared normal. At the level of the aortic constriction the esophagus widened, and the mucosa appeared hypertrophic. At the level of the phrenic hiatus there was a considerable degree of constriction with white streaking (leukoplakia) towards the stricture. There were no neoplastic changes apparently, and no biopsy was done. The esophagoscope was not introduced into the stomach.

FLUOROSCOPY

Fluoroscopic examination revealed no gross lung or heart changes. The costophrenic angles were clear, and no hepatic enlargement was noticed. The diaphragm was in normal position, and movements of respiration were normal.

Barium passed easily and quickly into the esophagus when swallowed, but stopped suddenly at a point just above the diaphragm. The esophagus ballooned in the lower third portion, forming a sac 18 cm. long and 5 cm. wide and causing preventriculosis. There was no visible peristalsis of this area of the esophagus. The dilated part filled evenly and smoothly with the tract resembling the twirling portion of a tornado pulsating from aortic pressure. Atropine sulfate 1/150 grain was given hypodermically and examination under the fluoroscope was again made in fifteen minutes. Very little barium had

passed into the stomach, and the preventriculosis remained as before. The patient was asked to breathe deeply, and when the diaphragm rose in inspiration, moderately large amounts of barium passed through the hiatus into the stomach from the esophagus. It was then observed that there was a gastroptosis, the greater curvature of the stomach being down to the brim of the true pelvis.

TREATMENT

The first treatment was given on November 7 when the Plummer dilator was used with a 10 mm. dilator on the staff, the patient having previously swallowed a lead shot attached to a linen string. There was slight resistance to the passage of this small dilator, but under the fluoroscope it was demonstrated to be in the stomach. On November 9 a 15 mm. bougie was passed; on November 15 one of 21 mm., on November 19 one of 29 mm. and on November 20 one of 41 mm. The patient could now swallow much better, and the bougies passed with no resistance. Dilatation was continued, and she was given a Hurst mercury tube, which she uses at home to keep the constricted portion dilated. A ptosis belt was also ordered for relief of any pull on the esophagus from the gastroptosis. She now has no pain nor sensation of fullness and is well except for occasional regurgitation.

COMMENT

The term cardiospasm has been a misnomer in the nomenclature, and preventriculosis is a more suitable term for this pathologic entity. In many cases of substernal distress studies should be made to rule out the presence of this condition. Preventriculosis is not uncommon. The etiology is obscure, but the fluoroscopic studies in the case presented revealed that the diaphragmatic pinchcock, which is emphasized by Jackson and Jackson,³ plays a most important role when the esophagus, thin-walled by reason of a stretching secondary to gastroptosis, is compressed at the phrenic hiatus. The treatment in this case was directed at the relief of the esophageal pull owing to the ptosed stomach and dilatation of the constricted area at the hiatus by bouginage.

BIBLIOGRAPHY

1. Bailey, R. B., and Jones, E. L.: Surgical Treatment of Cardiospasm, *South. Surg.* 9:666-683 (Sept.) 1940.
2. Plummer, H. S., and Vinson, P. P.: Cardiospasm: Report of 301 Cases, *M. Clinics N. America* 5:355 (Sept.) 1921.
3. Jackson, C., and Jackson, C. L.: Bronchoscopy, Esophagoscopy and Gastroscopy; A Manual of Peroral Endoscopy and Laryngeal Surgery, ed. 3, Philadelphia, W. B. Saunders, 1934.
4. Hurst, A. F.: Some Disorders of Esophagus, *J.A.M.A.* 102:582-587 (Feb. 24) 1934.
5. Mosher, H. P.: Oesophagus, *Surg. Gynec. & Obst.* 60:403-417 (Feb. no. 2A) 1935.

24 W. Chase St.

DISCUSSION

DR. HARRISON A. WALKER, Miami Beach: I wish to thank Dr. Heinberg for the opportunity to discuss his paper. His review of the literature has been thorough, and I enjoyed reading his discussion concerning his routine mechanical management of these cases. In considering terminology for this condition, it seems to me that achalasia of the esophagus would

be a more acceptable term, meaning simply failure to relax on the part of a bodily opening, such as a sphincter or valve. The term preventriculosis may be too easily construed to be indicative of cardiac disease or arrhythmia on first glance. Preventriculosis does, of course, refer to closing of the cardiac opening of the stomach owing to the action of the esophageal muscular fibers, or of the periesophageal diaphragmatic structures. The numerous other designations which have been used clearly reflect the controversial opinion regarding the etiology of this distressing malady. I lean, however, toward the pathogenic concept which is implied by the term achalasia.

The surgical importance of this condition is not generally sufficiently realized and has been minimized probably too greatly. Many investigators consider it to be one of the most common diseases of the esophagus, and with the exception of carcinoma, it seems to be the most frequent cause of esophageal obstruction. At the Mayo Clinic more than 1,200 cases have been observed, as reported by Gray and Skinner. Of 805 patients, treated conservatively by Moersch, 71 per cent were completely relieved. In Wachs' series of 52 cases, 16, or 30.3 per cent, required surgical therapy. Thus, it appears that a little less than one third of the cases are not completely relieved by conservative mechanical measures and that the majority of these probably come to more radical therapeutic procedures. Every patient should be given the benefit of conservative treatment first, and if these measures do not accomplish adequate relief of symptoms in a reasonable period of time, surgical intervention certainly should be considered. In the past there has been too great a hesitance on the part of the physician to recommend radical therapy because of the prevalent impression that the risk of operation is considerably greater than that of conservative therapy. Actually, however, the mortality of operative therapy is only slightly more than that of conservative therapy. In Moersch's series of 805 cases treated conservatively, 9 patients died from splitting of the esophagus, 2 died of starvation and 12 died at home. Of 239 collective cases in which cardioplasty and esophagostomy were the procedures performed, as reported by Ochsner and DeBakey, there were 10 deaths, or 4.2 per cent.

To the third then that require surgical treatment, four general types of operations are offered. These are operations directed at the dilated esophagus, at the cardia, at the diaphragm and at the nerve supply of the esophagus. It is generally agreed that procedures attacking the dilated esophagus are irrational and at present are of historical interest only. Operations directed at the cardia include dilatation, plastic types, excision, and deviation.

Von Mikulicz first performed dilatation of the cardia by introducing an instrument resembling a glove stretch-er through an incision in the anterior wall of the stomach. Rotgans later modified this procedure by forcefully invaginating the anterior wall of the stomach up through the cardia to avoid a possible peritoneal contamination by opening the stomach. It is evident that this procedure is certainly dangerous and accomplishes little more than mechanical dilatation by the natural oral route.

Plastic operations consist of cardiomyotomy and cardioplasty. Fairly good results were reported by Heller, who used an extra mucous cardiomyotomy similar to the Ramstedt procedure for hypertrophic pyloric stenosis. Another plastic procedure performed by Wendel is a type of pyloroplasty which is accomplished by incising longitudinally only down to the mucosa and then suturing the resultant defect transversely. In 93 per cent of 36 collective cases there were good results.

Excision of the cardia followed by esophagogastronomy is a radical procedure. Hardly justified in the presence of a benign lesion, it has been used rarely.

The procedure deserving the most consideration, and having the soundest rationale, is esophagogastronomy. This is accomplished as a side to side anastomosis, between the esophagus and stomach, short-circuiting the cardiac orifice in a manner similar to the Finney gastroduodenostomy. This procedure, as originally done by

Heyrovsky, left the presence of a spur which might produce some obstruction to passage of the bolus of food. Lambert crushed the spur with forceps. Thus, a much wider opening is created between the stomach and esophagus permitting freer emptying.

Ochsner, in a recent personal contact at the last meeting of the American College of Surgeons, stated that this method was preferred by him and that in a series of 88 collected cases in which it was used, functional results following the operation were considerably better than the roentgen studies indicated. These patients following operation remained completely relieved of all previous manifestations, whereas roentgenograms of the esophagus revealed some decrease in size, there was still some dilatation.

The procedure, briefly, consists of a transabdominal approach through a high left perimedial incision, division of the left lateral hepatic ligament permitting retraction of the left lobe of the liver, incision of the peritoneum over the esophagus at the site of its reflection on the diaphragm, mobilization of the esophagus downward by a sling of umbilical tape and blunt finger dissection. The esophagus is gradually pulled down about 10 cm. into the peritoneal cavity. A strip of umbilical tape is then tied tightly around the uppermost portion of the esophagus. This excellent suggestion of Fromme's serves to prevent spilling from the esophagus above and provides a means of anchoring the fundus of the stomach to the esophagus by placing an anchor suture about the tape. The esophagogastronomy is then performed, and the umbilical tape cut and removed. The line of anastomosis may be reinforced by an omental graft as suggested by Palugay.

Operative procedures directed at the diaphragm have been gradually discontinued because of the uniformly poor results obtained following any procedure directed at this structure. Similar results have been obtained following operations directed at the nerve supply, mainly, vagotomy and sympathectomy. The high incidence of these failures following this type of procedure may be explained on the basis of great anatomic variations in the nerve supplies to the cardia and possible difficulty in completely interrupting these nerve pathways.

It is my opinion that the procedure deserving the most consideration and having the soundest anatomic and physiologic basis is esophagogastronomy.

DR. HEINBERG (concluding): There is one other point in the roentgen diagnosis which was not mentioned in the paper. In preventriculosis the track of the barium is always in the center of the lumen. It is in the wall to one side in carcinoma and other organic strictures. There are many secondary pathologic conditions which may follow long duration of this disease, such as inflammatory lesions, diverticula and paralysis.

AMERICAN DOCTORS HAVE QUALIFIED FOR SERVICE IN GREAT BRITAIN

A total of 230 applications, up to September 4, had been received by the American Red Cross from physicians wishing to enroll with the Royal Army Medical Corps in response to a British Red Cross request for American physicians. The Journal of the American Medical Association for September 13 reports.

"Of these," The Journal says, "138 had been found unqualified because of age, lack of citizenship or other similar reasons. Ninety-two have been qualified and 42 have been given passports to Great Britain; the remaining 50 are in process."

EXPERIENCES OF A RAILWAY SURGEON
AND COUNTRY DOCTOR

Z. BRANTLEY, M.D.

GRANDIN

The experiences of a country doctor and railway surgeon are so varied that I find it difficult to decide where to begin and probably shall find it just as difficult to know where to end. The principal difference in the country doctor and the city specialist is that the specialist in the city specializes in one branch of medicine or surgery while the country doctor is a specialist in all the diseases of men, women and children. He has to be both druggist and surgeon, obstetrician and diagnostician, pediatrician and politician. He should also be a banker and a lawyer. People not only consult him about gout and belly ache, but they expect him to loan them money and give them expert advice about the settlement of estates and other legal problems.

I have been approached on numerous occasions for loans of varying denominations, and have usually been successful in outtalking the prospective borrower. But on one occasion I failed. In this case the client owed a large bill for professional services and wanted to borrow \$250 from me to pay up other debts so that he could immediately begin to pay on my bill. I truthfully informed him that I had no money to loan and was rather profuse with my apologies and regrets, whereupon he broke in, saying, "If that is the way you feel about it, just stick your 'John Henry' on a joint note I had prepared at the bank and brought along as I rather doubted you would loan me the cash."

My first experience as a lawyer in connection with my position as railway surgeon occurred over twenty years ago. Early one Monday morning as G. S. & F. Train No. 12 was approaching Florahome, Fla., a blind negro was chopping down a tree near the railroad track. The engineer, seeing that he could not stop the train in time to avoid the crash, made no attempt to apply the brakes. Had he done so, he would probably have caused someone to look out of the window and perhaps be injured.

The top of the tree struck the side of the coach for colored passengers breaking all the

window panes on that side and a few in the coach for white passengers. Otherwise there was no damage done to the train, and no one apparently was injured excepting an old colored preacher whom I shall call Uncle Charlie.

Uncle Charlie lived near Grandin, and I met the train and took him to my office. I examined him carefully and could find no evidence of injury except some broken particles of glass in his kinky hair. But Uncle Charlie insisted that he had received a severe blow on the right side of the head, that he was deaf in the right ear and that the right side of his neck was getting stiff. I examined the external auditory canal, removed a large impaction of wax and assured him that he would be all right.

He left my office, and I dismissed the case from my mind until some forty minutes later when I set out to make a call and found him sitting on the ground by the road-side crying. I took him in my car, carried him to his home and assured Mary, his wife, that he would be all right. Later in the day I heard that the attorney for the railway had been out there and had given him a \$30 draft to sign a release. On the next morning I went over to see how the preacher was doing and found him very much worse. The "misery" had extended from his head and neck down his back and into his lower limbs. He was not able to get out of bed and felt that he would be a cripple for the balance of his life. I assured him and Mary that I would personally see to it that the family did not suffer for the necessities of life until his attack of nerves had subsided. That afternoon I sent him a supply of provisions.

The next day, to my surprise, he sent back the provisions and also the \$30 draft. I questioned his son, who brought them, very carefully and drew from him that a white man, a Mr. R., had been to see Charlie and had advised him to return the draft as it was not sound money. He had also cautioned him not to accept any favors from the railroad company as he intended to sue for his rights since he was severely injured and not in his right mind when he signed the release.

I immediately communicated with Colonel Hall, the railway company's chief counsel in Macon, Ga., and gave him a detailed account of what had transpired. I told him I believed the preacher, through the agency of Mr. R., would sue the company, but that he was not injured and

did not have a chance in a thousand to win the suit. Colonel Hall answered my letter very promptly, enclosing another release form to be signed by the preacher. He stated that he was turning the case over to me to settle out of court as it would cost the company at least \$150 to finance a lawsuit, win or lose. I saw Uncle Charlie's son that afternoon and told him I would be over on the following morning at 9 o'clock to try to effect a settlement with his father as I knew he was nervous and entitled to some consideration.

When I arrived the next morning, the stage was all set. Uncle Charlie, Mary and Mr. R., their adviser, were awaiting me. I opened the ceremony by telling Uncle Charlie that I had been authorized by the railroad company's chief counsel to effect a settlement with him and that I would pay him a reasonable amount in cash if he would sign the new release, which I read to him. I then asked him if he felt he was in his right mind, and he answered in the affirmative. Also, Mr. R. and Mary expressed their willingness to sign a statement that Charlie was sane at that time.

At this point I asked Charlie how much he wanted for his signature on the release in question. He replied that he would have to consult Mr. R. and Mary in private before he could answer. So, with much difficulty Mary and Mr. R. assisted him to a safe distance for the consultation. When he returned, much exhausted and bending heavily on his stick, he said he wanted \$100. My reply was that I was there on a business mission, not to play Santa Claus, and that he had better make another offer immediately. After another exhausting consultation, he stated that he would take \$75. I then informed him that it was about time for our meeting to adjourn and that I would make him an offer which he could accept or reject as he chose. I told him I would give him \$50 and placed five \$10 bills on an old sewing machine on my side of the room. I warned him that he had only five minutes to make his decision and that there was no time for another consultation.

In a few minutes he said he reckoned he would be forced to accept my offer. With much difficulty, leaning on his stick and assisted by his faithful Mary and Mr. R., he limped to the machine and trembled while he signed his name. As he picked up the money, his hands became firm and his body erect; a new light shone in his

eyes and on his countenance as he shuffled the crisp bills. He walked away as nimbly as a boy when school is dismissed, leaving his stick leaning against the machine. As he reached his bedroom door, I glanced toward the stick and exclaimed: "Charlie! Wait a minute! Haven't you left something?" With a broad smile, the first since the accident, he turned his head and replied, "No, suh! No, suh, it's all here." His healing was as miraculous as the healings in the Good Book about which he had often preached.

It is said variety is the spice of life. The experiences of a country doctor and railway surgeon should, therefore, bring plenty of spice.

I know a certain country doctor who on Sept. 19, 1934, delivered three babies from three different mothers, two of whom were thirty-five miles apart. He also spent five hours in his office and during that time, in addition to routine office practice, he stitched a severe cut caused by glass from a broken windshield of an automobile, performed an operation to reduce and repair a strangulated inguinal hernia in a young negro man, and retired that night at 11 o'clock. This same doctor on May 28, 1936, delivered three babies from three different women, two of whom were thirty miles apart, but he did not have time for any other work on that day. In another year he delivered three babies from as many different women in thirty-six hours' time on three different occasions during that same year. I might say in passing that no pituitrin was used in any of the cases mentioned, but forceps were used a few times.

Along this same line I may add that in the last twenty-eight years I have attended the birth of over 1,800 babies. The greatest number of single deliveries from the same woman was ten and all of the children are now living. The largest number of babies delivered from the same woman was fourteen, but in this case there were three sets of twins. Eleven of these children are living.

Most country doctors from a scientific standpoint are brothers of old Rip Van Winkle, but we learn a few things from the School of Hard Knocks as we go along. From this school we have learned that fever in babies and young children, otherwise unaccounted for, is sometimes caused by pyelitis; also that nausea and vomiting in this same class of patients are sometimes caused by disease of the middle ear. And this School of Hard Knocks taught us to make blood

and urinary tests in all acute conditions before making even a tentative diagnosis. Before we made blood tests routine, the following diseases were mistaken for malaria: abscess of the liver, acute Bright's disease, pachymeningitis, urinary poisoning following urethrotomy five weeks before, lobar pneumonia and many other conditions.

On the first visit to a young man who had been thrown from a horse and was voiding blood, I made a diagnosis of injury to a kidney, but on visiting him the next day, I learned that he had chronic gonorrhea, which accounted for the hematuria. The young man denied having venereal disease, but an old man, who was grinning down by the gate, put me next. It is better not to brush the folks aside that offer information, but rather to hobnob with them and ask them for a "chaw of tobacco or to roll a cigaret."

Some night when the country doctor is called out to a house in a rural district and finds that the patient is a woman suffering from some obscure trouble, among the neighbors who are in "settin' up" he will find a good natured old woman sitting over in the corner with her head all tied up with a towel and her mouth full of snuff. If he goes over, whispers to her and asks her how she is feeling, she will probably give him the correct diagnosis, one he could not have figured out alone.

We also learn from this school that bronchial asthma is often accompanied by fever. One night I was called out to see a sick boy and made a diagnosis of bronchopneumonia. I told the folks I would call the next day. At that time I found the boy well, and his parents informed me that he had had several attacks of pneumonia that had cleared up overnight.

On another occasion I traveled one dark and rainy night over a long, rough and boggy road with which I was not familiar, to see a woman who was very sick, suffering as I thought from fulminating bronchopneumonia. I predicted in my own mind that the disease would prove fatal, but I made no comments nor hinted what my diagnosis was. I was waiting until I could get the husband alone as I knew he would go a piece with me to get me headed in the right direction for home. Then I would break the news to him gently. But he beat me to it and saved a lot of embarrassment when he asked, "Doctor, ain't

there anything that can be done to cure my wife of them old attacks of asthma?" So much for hard knocks.

The country doctor is usually somewhat uncouth in his personal appearance as compared to his city colleagues. You can tell him by his whiskers and by pants that are bagged out at the knees and also by shoes that are run down at the heels. At the county society, the state medical association, and the postgraduate school and clinics, you can always tell the country doctor, but you can't tell him much.

Some of us country doctors are "asleep at the switch" and don't know it. We whittle around and let our beards grow long. We chew tobacco, and the juice running down upon the beard is very unlike the precious ointment that ran down upon the beard of Aaron, mentioned in Psalm 133. But there is still time for us to wake up and cooperate with our colleagues in both city and country, and strive to build up the county society, which has been termed the "heart" of the American Medical Association.

In conclusion, we are told that the old fashioned country doctors are fast disappearing. The decrease in their numbers has been brought about chiefly by the building of paved roads and the coming of the automobile, which has crowded the horse and buggy off these highways. Also, improved hospital facilities and group work have drawn away a lot of the cream of country practice and left only skimmed milk for our consumption.

But still there is work for us to do. In ancient times when the afflicted depended on bathing in certain springs and in the pool of Bethesda to regain their health, they often needed assistance in getting into and out of the pool. Now, we as country doctors may yet do good by helping our patients into the pool, as it were, by directing them to the specialist or to colleagues better equipped than ourselves. While we may not be likened to the Great Physician, the Man of Galilee, we may nevertheless continue to go about doing some good and relieving suffering humanity. And when we have reached the sunset of our lives, may we fall like a mellow apple into the lap of Mother Earth and there repose in peace until the Resurrection Morning when we shall kneel at St. Peter's feet and plead for mercy before the Pearly Gates of that City not built with hands.

THE USE OF PITRESSIN IN PREOPERATIVE AND POSTOPERATIVE TREATMENT

LEROY A. WYLIE, M.D.
ST. PETERSBURG

Through the courtesy of the program committee I was allowed to choose a subject in which I am particularly interested. I wish to present my observations on the use of pitressin in the preoperative and postoperative treatment of 350 cases of abdominal surgery and to describe the procedure followed in these cases.

Few surgeons remain who still think that the battle is won or lost at the operating table. Most of them recognize the great importance of detail, not only in all that is concerned with the surgical operation itself, but also with all that has led up to it and all that follows it. There can be no question that the preparation and after-care increase the comfort of a surgical patient in convalescence and also largely control the results of an operation and likewise the mortality rate. Any neglect of detail may decide the patient's fate.

Many drugs have been used in preoperative and postoperative treatment, and many conclusions as to results have been recorded. It was this diversity of opinion that led me to undertake the study of this series.

Pitressin is an aqueous solution of the pressor principle of the posterior lobe of the pituitary gland. It stimulates the fibers of the smooth muscles of the arteries and arterioles and has a similar effect upon the musculature of the intestinal and urinary tracts. It likewise elevates blood pressure to a small degree.

After an injection of pitressin, the intestines are partially relaxed, the small capillaries are constricted and the lacteals are greatly injected as compared with the condition following injection of pituitary extract or prostigmin. The relaxation is much greater. The contraindications for the use of pitressin are intestinal obstruction, cardiorenal disease, hypertension, advanced arteriosclerosis and coronary thrombosis.

In my experience with this preparation the best results were obtained by the use of the smaller doses such as 5 or 10 units or 1/2 cc. given intramuscularly. Some physicians advocate giving it in full doses of 20 pressor units, but I observed that in postoperative cases thus

treated the patient has more pain and certainly the problem of restoring the normal function of the intestines and bladder is greatly increased.

Pitressin is valuable preoperatively in three ways. First, the administration of 1/2 cc. or 1 cc. half an hour before the operation makes the approach to and exposure of the abdominal field much easier, irrespective of the general anesthetic used or the skill of the anesthetist. The one exception is cyclopropane, which is seldom used in this locality. Because of the use of pitressin the approach to the site of operation is obtained with less manipulation; and with less time of exposure there is less postoperative shock.

Second, although there is no proof, it appears that less hemorrhage from the tissues occurs following the use of pitressin. Even though the technic of operation is unchanged, stitch abscesses and serum in the wound occur much less frequently than when this drug is not used.

Third, it has been observed that the intravenous injection of 50 cc. of concentrated glucose before the patient leaves the operating room augments the effect of pitressin and aids in maintaining fluid balance.

A great deal has been written of late about fluid balance in surgical cases, and there probably is no more important detail in postoperative care. In these cases the loss of fluid is usually greatly underestimated. The amount of fluid is reduced slightly through the loss of blood, somewhat more by fistulas and exudates and greatly by evaporation, perspiration and vomiting. Especially are patients advanced in years aided in their convalescence by measures that increase the vascular tone and maintain the fluid balance. With these patients care must be taken to give the glucose slowly because of its effect upon the right side of the heart.

Postoperative administration of 1/2 cc. or 10 depressor units of pitressin is started within four hours and continued until four doses have been given at intervals of six hours. This procedure in the average case assures the patient of no discomfort from gas for forty-eight hours. The abdomen is soft and flat on palpation. It is surprising, too, how much less morphine or pan-topon is needed to relieve pain and restlessness. Rarely does a patient require more sedation than bromides or nembutal after the second night. In treating the highly neurotic person one may continue the administration of pitressin for the third

postoperative day and use the rectal tube or give a low soda enema. Elimination in the average case is easily established by mineral oil and castor oil on the third day.

The main problem in assuring a comfortable convalescence is the control of dehydration, ileus, shock and vomiting. Dehydration is greatest in the aged patient because of lack of hepatic storage of glycogen and is increased in excessively warm climates through the loss of sodium chloride by perspiration. This condition is combated by giving 1,000 cc. of a 5 per cent solution of glucose and sodium chloride intravenously or by hypodermoclysis. When pitressin is used postoperatively the amount of dehydration seems to be lessened.

The severity of the ileus that follows operation in cases of obstruction, enterostomy, resection and anastomosis, so often accompanied by hiccough, emesis, discomfort and increasing pulse rate, is greatly decreased by the administration of small doses of pitressin and the use of the Wangenstein tube. There is a considerable advantage in treating these cases in this manner as much less opiate is required to make the patient comfortable.

Postoperative shock is best treated by utilizing the accepted methods of prevention of shock. They include:

1. Careful surgical technic is essential and, as mentioned before, it is aided and the time required for operation is reduced because of the extra relaxation obtained as a result of the administration of pitressin.

2. Dehydration is checked by the intravenous administration of glucose before the patient leaves the operating room.

3. The control of fear and pain is accomplished by proper sedatives.

4. In cases in which infection, extreme age and anemia are factors the increasing of hemoglobin by transfusions is important.

5. The administration postoperatively of 50 cc. of a 6 per cent solution of acacia is helpful.

After surgical shock has occurred the administration of oxygen, as advocated by Priestley since March 1938, gives excellent results. It should be emphasized that nearly all methods of combating shock that are of proved clinical value

are arrived at with a view to improving the circulation of the blood and increasing the pressure of oxygen in the tissues, especially the central nervous system.

Vomiting and excessive thirst during the early postoperative stage are perhaps the most annoying to the patient. By rigidly adhering to total abstinence from cracked ice, fruit juices and other fluids, except for the smallest quantities of warm tea, bouillon or bisodol in warm water, the patient is comfortable and free from this distress. Certainly with the administration of pitressin and glucose this annoying symptom is almost entirely absent.

CONCLUSION

The fact that the period of postoperative care is made easier for the patient and the further fact that the discomfort and operative risks are lessened should be sufficient reason for the use of pitressin. At all times in this small series of surgical cases the great advantage of this method of treatment over previous methods used in the postoperative care of surgical cases was manifest.

On several occasions it was possible to reopen the abdomen at autopsy twelve hours, twenty-four hours and five days after an operation had been performed. In each instance practically no exudate was found in the abdominal cavity, and only slight adhesions were observed. Quite in contrast were the plastic adhesions of the viscera and the large quantities of exudate previously observed.

Dr. James E. Lofstrom,¹ radiologist of Detroit, recently published a résumé of 1,000 cases treated with pitressin in which annoying gas shadows were thereby abolished. Studies of the barium-filled colon have proved the efficacy of pitressin in promptly emptying the large bowel. It does not interfere with gallbladder contraction or evacuation, nor change the emptying time of the normal stomach. It does, however, increase the tone of the intestine dilated by paralysis or obstruction.

REFERENCE

1. Lofstrom, J. E.: Further Observations on Elimination of Intestinal Gas Shadows in Roentgenography, *Radiology* 36:34-41 (Jan.) 1941.

FLORIDA MEDICAL ASSOCIATION

OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., PRESIDENT.....Miami
GILBERT S. OSINCUP, M.D., PRESIDENT-ELECT.....Orlando
LUTHER W. HOLLOWAY, M.D., 1ST VICE-PRES.....Jacksonville
FREDERICK K. HERPEL, M.D., 2ND VICE-PRES. *W. Palm Beach*
WALTER C. PAYNE, M.D., 3RD VICE-PRES.....Pensacola
SHALER RICHARDSON, M.D., SEC'Y-TREAS.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., CHAIRMAN, "C," '44 Jacksonville
J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43. *West Palm Beach*
WALTER C. PAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D. (EX-OFFICIO).....Miami
SHALER RICHARDSON, M.D. (EX-OFFICIO).....Jacksonville
STEWART G. THOMPSON, D.P.H. (ADVISORY).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., CHAIRMAN, "C," '43.....St. Augustine
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
HOMER L. PEARSON, M.D., "F," '44.....Miami
JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H.D. VAN SCHAICK, M.D., CHAIRMAN, "C," '43 Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MC CONNELL, M.D., "D," '42.....St. Petersburg
BRICEY M. RHODES, M.D., "A," '44.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami
WALTER C. JONES, M.D. (EX-OFFICIO).....Miami
SHALER RICHARDSON, M.D. (EX-OFFICIO).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., CHAIRMAN, "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
J. N. MC LANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Orlando

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., CHAIRMAN, "C," '42 Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., CHAIRMAN, "F," '42.....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKNORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., CHAIRMAN, "C," '42 Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43 *West Palm Beach*
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., CHAIRMAN, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R.W.S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., CHAIRMAN, "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '43.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., CHAIRMAN, "C," '42 Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., CHAIRMAN, "F," '44 Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., CHAIRMAN, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. MCEWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYSENBUG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., CHAIRMAN, "E," '44.....Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., CHM., "F," '42.....W. P. Beach
LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARDLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., CHAIRMAN, "F," '44.....Coral Gables
THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
EUGENE C. PEEK, M.D., "B," '42.....Ocala
COUNCILL C. RUDOLPH, M.D., "D," '42.....St. Petersburg
WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., CHAIRMAN, "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

TWELFTH—W. DUNCAN OWENS, M.D., CHM., '43 Miami Bch.
FIRST—WILLIAM C. ROBERTS, M.D., '42.....Panama City
SECOND—C. D. WHITAKER, M.D., '43.....Marianna
THIRD—J. M. PRICE, M.D., '43.....Live Oak
FOURTH—ALVA T. COBB, M.D., '42.....Gainesville
FIFTH—LUCIEN Y. DYRENFORTH, M.D., '43.....Jacksonville
SIXTH—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
SEVENTH—JOHN R. BOLING, M.D., '43.....Tampa
EIGHTH—HOWARD V. WEEMS, M.D., '42.....Sebring
NINTH—CARL D. HOFFMANN, M.D., '42.....Orlando
TENTH—E. B. HARDEE, M.D., '43.....Vero Beach
ELEVENTH—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., CHAIRMAN, "A," '43.....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFROE DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., CHAIRMAN.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. PAULLIN, M.D., (A.M.A. EX-OFFICIO).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., DELEGATE.....Jacksonville
HERBERT L. BRYANS, M.D., ALTERNATE.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., DELEGATE.....Orlando
GEORGE M. DAWSON, M.D., ALTERNATE.....West Palm Beach
(Terms expire Dec. 31, 1943)

COMMITTEES—Continued

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., CHAIRMAN, 1919.....	Jacksonville
W. HENRY SPIERS, M.D., SECRETARY, 1938.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902.....	Pensacola
HENRY E. PALMER, M.D., 1909.....	Tallahassee
ROBERT H. MC GINNIS, M.D., 1915.....	Jacksonville
FREDERICK J. WALTER, M.D., 1918.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923.....	Jacksonville
JOHN C. VINSON, M.D., 1924.....	Tampa
JOHN S. MCEWAN, M.D., 1925.....	Orlando
H. MASON SMITH, M.D., 1926.....	Tampa
JOHN A. SIMMONS, M.D., 1927.....	Arcadia
FREDERICK J. WAAS, M.D., 1928.....	Jacksonville
HENRY C. DOZIER, M.D., 1929.....	Ocala
JULIUS C. DAVIS, M.D., 1930.....	Quincy
GERRY R. HOLDEN, M.D., 1932.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....	Tampa
HOMER L. PEARSON, M.D., 1934.....	Miami
HERBERT L. RYANS, M.D., 1935.....	Pensacola
ORION O. FEASTER, M.D., 1936.....	St. Petersburg
EDWARD JELKS, M.D., 1937.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....	Fl. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....	Century

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association, Box 1018

Jacksonville, Fla.

Telephone 5-0577

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.....	Orlando
FRANK C. METZGER, M.D.....	Tampa
HOMER L. PEARSON, M.D.....	Miami
J. H. POUND, M.D.....	Tallahassee
W. MC L. SHAW, M.D.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., CHAIRMAN.....	Miami
SHALER RICHARDSON, M.D.....	Jacksonville
HERMAN WATSON, M.D.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., CHAIRMAN.....	Jacksonville
THEODORE F. HAHN, M.D.....	Deland
COUNCIL C. RUDOLPH, M.D.....	St. Petersburg

PRE-CONVENTION MEETING

An important occasion each year is the Association's pre-convention meeting. The next pre-convention meeting will be held on Sunday, January 4, in Jacksonville.

Sunday forenoon will be devoted to committee meetings. Already scheduled are meetings of the Executive Committee and the Committee on Scientific Work. Many other committees may find it convenient to meet at this time, and the chairmen of these committees should notify their

members personally, giving the time and place of the Sunday forenoon meetings.

Among other items on its agenda, the Executive Committee will consider the invitations received from component societies who wish to entertain the 1943 annual meeting. The Committee on Scientific Work will prepare the official scientific program for the state convention to be held in Palm Beach, April 13 to 15.

At noon all members will gather for luncheon which will be immediately followed by a general session. At this time each councilor will read his annual report and turn it in for publication in the Journal, and the chairmen of regular committees will make verbal reports of progress. The annual written reports from the various committees, as well as the report of the Council as a whole, will be presented at the first meeting of the House of Delegates at the annual convention.

All members of the State Association are invited to attend the pre-convention meeting in Jacksonville, Sunday, January 4.

DEFERMENT OF MEDICAL STUDENTS

An appeal to junior and senior medical students to enrol in the War Department Reserve Pool by taking appointments in the Medical Administrative Corps whereby they can continue their education and then be available for military service as medical officers after they have completed their internship, is made by The Journal of the American Medical Association for October 18. The Journal's editorial on "Deferment of Medical Students" says:

When it became apparent in June 1940 that the medical profession would be required to provide the Army, the Navy and the Public Health Service with a considerable number of physicians to meet the needs of the preparedness campaign, medical leaders with foresight urged the deferment of medical students and interns who might be called up under the Selective Service Act. Almost every agency connected with medical education took an interest in the problem. Eventually, as has been previously published in The Journal, arrangements were made to defer medical students and interns. Moreover, opportunity was provided for official enrolment of junior and senior students in the War Department Reserve Pool, thus permitting them to continue their education and making them available for military service as medical officers after their medical education and internship had been completed. Unfortunately, a relatively small percentage of the medical students in the junior and senior years have accepted appointment to the Medical Administrative Corps, which would make them available in the War Department's Reserve Pool. As a result, a situation impends which is giving the Offices of the Surgeon Generals of the Army and Navy great concern. Obviously, they must plan for

a continuous supply of medical officers for at least the five year program contemplated by the Selective Service Act.

If the young men who are attending the medical colleges at this time persist in avoiding military service, the Army will not have the medical personnel that is required. The folly of the medical students who have failed to avail themselves of the opportunity offered to them is so obvious as to cause wonderment. At any time, under the Selective Service Act, deferment could be discontinued. If the needs of the Army demand such discontinuance, every medical graduate could be called at the moment he graduates or before. The present situation in which medical students are permitted to have continuity of medical education and internship before being called into military service was achieved only with immense effort and by favorable consideration on the part of representatives of the Army, the Navy, the Public Health Service, the Health and Medical Committee, the Committee on Medical Preparedness, the Association of American Medical Colleges and innumerable other agencies working with the National Selective Service. The representatives of the National Selective Service, including the director and his medical advisory staff, have had utmost sympathy with the importance of deferment of medical students so as to provide continuity of medical education. So far as we can learn, not more than four of five students in good standing in medical schools of repute in this country have been inducted into the military service.

Now the failure of the student to cooperate as he should may bring about a situation in which all of the planning will be put to naught. Failure of students to apply for commissions as second lieutenants in the Medical Administrative Corps or as ensigns in the Navy may place on the deans of medical schools the responsibility for their actions, so that deans will be compelled to discontinue recommendations for deferment for junior and senior students. Moreover, interns and residents constitute the pool from which the Army must expect to draw replacements for medical officers in the next two years. If these groups do not come into the reserve corps, medical reserve officers now in the Army will be held for prolonged service. Here a responsibility rests on superintendents of hospitals. Deferment of resident or interns beyond one year should not be requested unless the physician concerned cannot be replaced and unless his withdrawal would be a serious handicap to the service of the institution.

An appeal to the patriotism of the medical student should in itself be sufficient to cause promptly a favorable response. Always it has been the proud boast of the medical profession in the United States that it was never found lacking when the nation called. In every conflict in which our nation has been engaged, thousands of physicians have rushed to be among the first to give of their services. The preparedness of the nation is vital to its future safety. The threat that a display of lack of patriotism will result in prompt action by the government in discontinuing deferment should make even the unpatriotic see the logic of offering the fullest possible cooperation by enrolment in the War Department's Reserve Pool at this time.

VIOLATIONS OF MEDICAL PRACTICE ACT

We have been informed that William Patrick Carroll, St. Augustine, charged with practicing medicine without a license, pleaded guilty October 2, 1941, and was sentenced to serve one year in the state penitentiary at Raiford. Reported by M. H. Doss, State Board of Health.

MEDICAL DISTRICT MEETINGS

TALLAHASSEE, GAINESVILLE, ST. AUGUSTINE

The fifth annual meetings of the Northwest, North Central and Northeast Districts were held on the afternoons of October 2, 3, and 4, respectively. They were well attended, as indicated by the registration which follows.

SCIENTIFIC SESSIONS

The scientific programs were of definite interest. Essayists were well prepared, and their papers not only held the attention of their audience but evoked a great deal of discussion. The programs are shown by districts.

TALLAHASSEE

Presiding, Dr. C. D. Whitaker, Junior Councilor
"The Wassermann Test" (Illustrated), Dr. E. Henry Ruediger, Chattahoochee
"Thyroid Diseases" (Lantern Slides), Dr. Sidney G. Kennedy, Pensacola
"Dextrocardia," Dr. Henry E. Palmer, Tallahassee
Address (By Invitation), "Mechanism of Neurologic Symptoms for General Practice" (Illustrated), Dr. W. C. McConnell, St. Petersburg

GAINESVILLE

Presiding, Dr. Alva T. Cobb, Senior Councilor
"The Management of the Duodenal Ulcer Patient" (Illustrated), Dr. John E. Maines, Jr., Gainesville
"Airsickness," Dr. Richard C. Cumming, Lakeland
Address (By Invitation), "A Plea for the Conservative Treatment of the Inevitable and Incomplete Abortion," Dr. W. C. Roberts, Panama City

ST. AUGUSTINE

Presiding, Dr. L. Y. Dyrenforth, Junior Councilor
"Diseases of the Gallbladder and Their Recognition," Dr. J. R. Vallotton, Daytona Beach
"Fractures of the Tibia," Dr. Charles B. Mabry, Jacksonville
Address (By Invitation), "Experience with the 'Five Day Plan' for Treatment of Early Syphilis," Dr. Wiley M. Sams, Miami

FIRST GENERAL SESSIONS

At Tallahassee the first general session was called to order in the banquet hall of the Cherokee Hotel by Dr. William C. Roberts, senior councilor. The address of welcome was given by Dr. G. W. Brown, president of the Leon County Medical Society. Dr. William C. Roberts, on behalf of the Bay County Medical Society, extended an invitation to the group to meet in Panama City in 1942. By unanimous vote the invitation was accepted.

In Gainesville Dr. Alva T. Cobb, senior councilor, called the first general session to order in the breakfast room of the Thomas Hotel. After an address of welcome by Dr. J. L. Summerlin, president of the Alachua County Medical Society, Dr. Eugene G. Peek, representing the Marion County Medical Society, invited the

members of the North Central Medical District to meet in Ocala the following year. His invitation was unanimously accepted.

At St. Augustine Dr. W. Duncan Owens, chairman of the Council, called the meeting to order in the absence of Dr. Maximilian Stern, senior councilor, in the ballroom of the St. Augustine Links and Country Club. Dr. Reddin Britt, chairman of the local committee on arrangements, substituting for Dr. A. C. Walkup, president of the St. Johns County Medical Society, gave the address of welcome. On behalf of the Duval County Medical Society, Dr. Charles B. Mabry invited the group to meet in Jacksonville in 1942. By unanimous vote the invitation was accepted, and the chairmen of regular committees were of especial importance.

SECOND GENERAL SESSIONS

Addresses by President Walter Jones, Secretary Shaler Richardson and Dr. Duncan Owens, chairman of the Council, followed by verbal reports from Dr. Gilbert S. Osincup, President-elect and the chairmen of regular committees were of especial importance.

Dr. Jones explained some of the handicaps encountered by the president in making committee appointments, which are the result of the present boundaries of committee districts. He illustrated his point by directing attention to the difference between the medical population of District B, which totals 88, and that of District F, which totals 425. An incoming president is required to make as many appointments from the 88 members in District B as from the 425 members in District F. It was suggested that the number of committee districts be reduced from six to four and that the geographical boundaries be rearranged so as to equalize, as nearly as possible, the number of members in the four districts. Dr. Jones presented an outline map showing the present setup and the suggested changes.

Dr. Richardson explained that through the cooperation of the State Medical Association, the State Board of Health and the State Board of Medical Examiners, a definite move has been made to rid the state of violators of the Medical Practice Act. The machinery has been set up under the State Board of Health, which is an arm of the state government, and the results so far have been gratifying. He requested that members report promptly all instances of violation in order that proper legal steps may be taken to bring the offenders to justice.

Dr. Owens discussed some of the difficulties encountered in securing essayists for the scientific programs. He urged those who wished places on next year's programs to file their applications with him as early as possible. He also supplemented Dr. Jones' comments on the rearrangement of districts, and explained how the proposed changes would affect the activities of the council and of the district meetings.

The fact that these problems were presented at each district meeting, and that advice and counsel was sought from the members, is evidence that the officers are striving to have all units of the Association working in harmony and to the best interests of the membership as a whole.

Interesting reports were given by representatives of the following committees: Medical Postgraduate Course, Legislation and Public Policy, Public Relations, Executive, and Scientific Work.

The second general session of a district meeting is informal in character and affords a splendid opportunity for the members to discuss in round table fashion the problems that beset the medical profession. Here they may express themselves and secure from the officers an explanation of the policies of the Association and the reasons therefor. It is the kind of discussion which solidifies the Association as the strength of any organization is largely measured by the interest and help of each individual member.

ENTERTAINMENT

The local committees on arrangements of the host societies left no stone unturned to entertain royally members, guests and ladies. A social hour was scheduled at each meeting for 6 p.m., followed at 7 p.m. by a delightful dinner which at St. Augustine took the form of an old fashioned Georgia barbecue. In charge of arrangements at Tallahassee were Dr. James H. Pound, Dr. F. T. Holland and Dr. G. W. Brown; at Gainesville, Dr. John H. Thomas, Dr. C. F. Ahmann and Dr. R. E. Summitt; at St. Augustine, Dr. Reddin Britt, Dr. Herbert E. White and Dr. Charles C. Grace.

By unanimous vote, those in attendance expressed deep appreciation to the members of the entertaining societies, the hotel officials, city officials, newspapers and others who contributed to the success of the district meetings.

REGISTRATION

TALLAHASSEE—DISTRICT A

The total registration was 79, of which num-

ber 44 were Association members (from this district, 30), 10 were visitors and 25 were ladies.

Officers: W. Duncan Owens, Miami Beach, chairman of Council; W. C. Roberts, Panama City, senior counselor; C. D. Whitaker, Marianna, junior counselor; Stewart Thompson, Jacksonville, managing director.

Bonifay: R. H. Segrest. *Chattahoochee:* W. G. Miles, E. Henry Ruediger. *Chipley:* F. M. Watson. *Gainesville:* A. T. Cobb, George C. Tillman. *Greensboro:* O. W. Gardner. *Havana:* J. W. Sapp. *Jacksonville:* T. Z. Cason, L. Y. Dyrenforth, L. C. Gonzalez, R. B. McIver, J. N. Patterson, W. H. Pickett, Shaler Richardson. Harold D. Van Schaick. *Marianna:* D. A. McKinnon. *Miami:* Walter C. Jones. *Orlando:* Gilbert S. Osincup.

Pensacola: J. D. Bell, Herbert L. Bryans, H. O. Heath, Sidney G. Kennedy, A. L. Stebbins, Herbert Virgin, Jr. *St. Petersburg:* W. C. McConnell. *Tallahassee:* Edson J. Andrews, Edward R. Annis, Terry Bird, G. W. Brown, M. R. Clements, L. L. Dozier, E. W. Ekermeier, G. H. Garmany, George H. Gwynn, Lucille J. Marsh, Henry E. Palmer, J. H. Pound, Sarah Parker White, B. A. Wilkinson, John L. Williams.

Visitors—Chattahoochee: J. T. Benbow. *Quincy:* A. Scott Turk. *Tallahassee:* J. A. Baird, Mark F. Boyd, G. K. Massengill, Harold O. Hallstrand. *Georgia—Cairo:* Henry Sherman. *Thomasville:* Rudolph Bell, J. J. Collins.

Ladies—Chattahoochee: Mrs. W. G. Miles, Mrs. E. H. Ruediger. *Gainesville:* Mrs. A. T. Cobb. *Miami:* Mrs. W. Duncan Owens. *Orlando:* Mrs. G. S. Osincup. *Pensacola:* Mrs. Sidney Kennedy, Mrs. A. L. Stebbins. *Quincy:* Mrs. A. Scott Turk. *St. Petersburg:* Mrs. W. C. McConnell. *Tallahassee:* Mrs. Edson J. Andrews, Mrs. Edward R. Annis, Mrs. J. A. Baird, Mrs. G. W. Brown, Mrs. James E. Cavanagh, Mrs. M. C. Clark, Mrs. M. R. Clements, Mrs. L. L. Dozier, Mrs. L. J. Graves, Melba Hutchison, Mrs. H. E. Palmer, Mrs. J. H. Pound, Mrs. S. Lyle Rogers, Mrs. Howard E. Sellards, Mrs. B. A. Wilkinson, Mrs. John L. Williams.

GAINESVILLE—DISTRICT B

The total registration was 71, of which number 40 were Association members (from this district, 27), 3 were visitors and 28 were ladies.

Officers: W. Duncan Owens, Miami Beach, chairman of Council; A. T. Cobb, Gainesville, senior counselor; Stewart Thompson, Jacksonville, managing director.

Archer: F. C. Jones. *Brooksville:* G. R. Creekmore. *Crystal River:* W. B. Moon. *Foley:* W. J. Baker. *Gainesville:* Chester F. Ahmann, J. M. Dell, Jr., W. T. Elmore, W. Lassiter, John E. Maines, Jr., Walter E. Murphree, T. A. Snow, J. L. Summerlin, W. C. Thomas, George C. Tillman. *Hawthorn:* George M. Floyd. *Jacksonville:* Louie Limbaugh, J. G. Lyerly, R. B. McIver, Webster Merritt, J. N. Patterson, William H. Pickett, Shaler Richardson, Harry B. Smith. *Jasper:* E. C. Crouch.

Lake Butler: John E. Maines. *Lake City:* L. J. Arnold, Jr., T. H. Bates, R. B. Harkness. *Lakeland:* Richard C. Cumming. *Melrose:* H. F. Preston. *Miami:* Walter C. Jones. *Micanopy:* I. A. Dailey. *Ocala:* J. N. Moore, Eugene G. Peck. *Orlando:* Gilbert S. Osincup. *Panama City:* W. C. Roberts. *Raiford:* O. L. Kelley. *Williston:* J. W. McMurray.

Visitors—Jacksonville: R. C. Hood. *New York City:* Ralph S. Muckenfuss.

Ladies—Archer: Mrs. F. C. Jones. *Brooksville:* Mrs. G. R. Creekmore. *Gainesville:* Mrs. Edwin H. Andrews, Mrs. A. T. Cobb, Mrs. J. M. Dell, Sr., Mrs. J. M. Dell, Jr., Mrs. Wilburn Lassiter, Mrs. John E. Maines, Jr., Mrs. Walter E. Murphree, Mrs. Thomas A. Snow, Mrs. J. L. Summerlin, Mrs. W. C. Thomas, Mrs. George C. Tillman. *Jacksonville:* Mrs. S. M. Copeland, Mrs. Gordon H. Ira, Mrs. F. W. Krueger, Mrs. J. H. Owens, Mrs. W. H. Pickett. *Jasper:* Mrs. E. C. Crouch. *Lake City:* Mrs. L. J. Arnold, Jr. *McIntosh:* Mrs. J. L. Strange. *Miami:*

Mrs. W. J. Barge. *Miami Beach:* Mrs. Duncan Owens. *Ocala:* Mrs. Richard Cumming, Mrs. Carney Mimms. *Orlando:* Mrs. G. S. Osincup. *Raiford:* Mrs. O. L. Kelley. *Williston:* Mrs. J. W. McMurray.

ST. AUGUSTINE—DISTRICT C

The total registration was 91, of which number 52 were Association members (from this district, 43), 7 were visitors and 32 were ladies.

Officers: W. Duncan Owens, Miami Beach, chairman of Council; L. Y. Dyrenforth, Jacksonville, junior counselor; Stewart Thompson, Jacksonville, managing director.

Cocoa: T. C. Kenaston. *Daytona Beach:* George M. Green, E. H. Lenholt, Morris B. Seltzer, J. Ralph Valotton, L. von Meysenbug, J. R. Wells. *DeLand:* G. A. Davis, T. F. Hahn, Hugh West. *Ft. Lauderdale:* R. L. Elliston. *Gainesville:* A. T. Cobb. *Jacksonville:* Matthew Arnow, W. L. Ashton, John B. Black, J. L. Borland, Fred H. Bowen, T. Z. Cason, L. C. Gonzalez, Banks H. Goodale, Karl Hanson, William G. Harris, Edward Jelks, S. I. Kemp, Hayne Kendrick, F. G. King, Louie Limbaugh, R. B. McIver, C. B. Mabry, J. N. Patterson, William H. Pickett, Shaler Richardson, Harry B. Smith, H. D. Van Schaick, Merrill Wattles, J. Frank Wilson.

Miami: Walter C. Jones, Wiley M. Sams. *New Smyrna Beach:* W. C. Chowning, Harry Z. Silsby. *Orlando:* L. C. Ingram, Gilbert S. Osincup. *Panama City:* W. C. Roberts. *St. Augustine:* Reddin Britt, Charles C. Grace, R. D. Harris, G. W. Potter, D. T. Rankin, W. D. Webb, Herbert E. White.

Visitors—Ft. Lauderdale: Otto W. Schwalb. *Jacksonville:* A. Gordon Gauld, Sidney Halpern, Alexander I. Kernish, Edwin O. Wicks. *St. Augustine:* H. S. Norris.

Ladies—Cocoa: Mrs. T. C. Kenaston. *Daytona Beach:* Mrs. P. A. Drohomer, Mrs. George M. Green, Mrs. M. B. Seltzer. *Jacksonville:* Mrs. S. M. Copeland, Mrs. L. Y. Dyrenforth, Mrs. A. Gordon Gauld, Mrs. Banks H. Goodale, Mrs. Gordon H. Ira, Mrs. A. Kernish, Mrs. F. G. King, Mrs. Raymond H. King, Mrs. F. W. Krueger, Mrs. Charles B. Mabry, Mrs. J. H. Owens, Mrs. E. C. Swift, Mrs. Merrill Wattles. *Miami:* Mrs. W. J. Barge, Mrs. W. Duncan Owens. *New Smyrna Beach:* Mrs. W. C. Chowning. *Orlando:* Mrs. L. C. Ingram, Mrs. Gilbert S. Osincup. *St. Augustine:* Miss Helen Baker, Mrs. Reddin Britt, Mrs. Mary Brown, Mrs. Gatlin, Mrs. Charles C. Grace, Mrs. Ora Guinn, Mrs. R. D. Harris, Mrs. D. T. Rankin, Miss Charlene Whitten, Mrs. Ervin Williams.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. Karl Hanson of Jacksonville announce the birth of a daughter, Ingrid, on October 2.

Dr. and Mrs. S. C. Harvard of Brooksville announce the birth of a daughter, Jane Hunter, on September 30.

Dr. and Mrs. R. N. Joyner of Marianna announce the birth of a daughter, on August 12.

Dr. and Mrs. John W. Hayes of Jacksonville announce the birth of a son, Robert William, on October 11.

MARRIAGES

Dr. Nathan Weil, Jr. of Jacksonville and Miss Lenore Pumin of Chicago were married October 4.

Dr. Frederick Hardy Bowen and Miss Henrietta Caldwell of Jacksonville were married October 25.

Dr. Frank T. Linz and Miss Josephine Gwaltney McGowan of Tampa were married October 24.

DEATHS

Dr. Robert Drysdale May of Jacksonville died on October 6.

STATE NEWS ITEMS

County medical societies wishing to entertain the 1943 convention of the State Association should make application prior to January 4, 1942. Invitations for meeting places of the 1943 annual convention must be presented to the Executive Committee, in accordance with Chapter VII, Section 2 of the By-Laws. All invitations should be mailed to Box 1018, Jacksonville.

President Walter C. Jones announces that the Pre-convention meeting will be held in Jacksonville, Sunday, January 4, 1942. Annual reports of councilors will be read at that time and turned in for publication in the Journal. Verbal reports from chairmen of regular committees will also be heard. Sunday forenoon will be devoted to meetings of regular committees.

Sunday afternoon and Monday forenoon, prior to the opening of the 1942 convention in Palm Beach, will be reserved for annual meetings of specialty groups. The officers of these groups are urged to complete their programs by the end of December and forward complete information to the Association's office, P. O. Box 1018, Jacksonville, for publication in the convention number of the Journal.

Dr. F. S. Whitman of West Palm Beach recently returned from New York where he took a six weeks' course in cardiology and internal medicine.

Dr. W. B. Moon of Crystal River made a trip through Iowa, Illinois, Virginia and Washington, D. C., visiting hospitals and clinics, during the month of September.

Dr. H. A. Barge of Miami returned in September from a trip through Georgia where he visited clinics and hospitals.

Dr. Allen P. Gurganious of Palatka visited clinics in New Orleans and Cuba during the month of September. His trip through the Gulf

of Mexico and the Caribbean Sea included a visit to the Panama Canal Zone.

Dr. I. M. Hay of Melbourne attended a three-day surgical seminar at Columbia University in New York the latter part of October.

Dr. G. L. Harrell of Vero Beach attended a series of medical lectures at Tulane University, New Orleans, the latter part of October.

Dr. F. H. Dieterich of Miami has returned from a month of study at the Medical Examiner's Laboratory at Bellevue Hospital, New York.

Dr. Terry Bird of Tallahassee was the principal speaker at a meeting of the Kiwanis Club in the San Carlos Hotel, Pensacola, in September. He explained the work of the Florida Crippled Children's Commission.

Dr. Howard K. Edwards of Miami was on September 26 appointed medical director of the Eastern Air Lines to succeed the late Dr. Ralph N. Greene.

Dr. Joseph H. Lucinian of Miami was recently elected a Fellow of the American College of Radiology.

Dr. B. F. Hart of Winter Park is at present senior resident in obstetrics and gynecology at Louisville City Hospital and instructor at the University of Louisville Medical School. He spent last year at the University of Georgia Hospital as resident in obstetrics and gynecology.

Florida doctors who attended the meeting of the American Roentgen Ray Society held in Cincinnati, September 23 to 26, were: J. M. Dell, Jr., Gainesville; W. McL. Shaw, Jacksonville; A. G. Levin, J. H. Lucinian and Gerard Raap, Miami; J. J. Maguire, Pensacola; Annette M. Feaster, O. O. Feaster and H. T. Stull, St. Petersburg; J. C. Dickinson, Tampa.

ROBERT DRYSDALE MAY

Dr. Robert D. May of Jacksonville died on October 6 after a brief illness, at the age of 48.

A native of Ashville, Florida, Dr. May spent most of his life in Jacksonville. He was a graduate of the Emory Medical School of Atlanta, class of 1917, and served his internship at St. Vincent's Hospital, Jacksonville.

During the World War he was a captain in the Medical Corps, attached to the Fourth Division. He served for a year overseas. Returning to Jacksonville in 1919, he entered general practice with his father, the late Dr. Robert Lee May.

Dr. May was a member of the Duval County Medical Society, the Florida Medical Association, and a Fellow of the American Medical Association. He was also affiliated with the Masonic order. At the time of his death he was a member of local Draft Board No. 6 of the selective service organization.

Survivors include his widow, Mrs. Caroline S. May; a daughter, Caroline; two sons, Robert D., Jr., and Richard D.; a brother, Albert May; two sisters, Mrs. A. M. Greason of Jacksonville and Mrs. D. B. Hobbs of Pittsburgh.

THOMAS SISSON ANDERSON

Dr. T. S. Anderson of Live Oak died at his home on September 14, following a lengthy illness. He had practiced his profession in Suwannee County since 1884 and was, until his last illness, active in local civic and fraternal circles. He was 84 years of age.

A native of Missouri, Dr. Anderson received his medical training at Christian College, Canton, Mo. and at Iowa Medical School, Keokuk, Iowa. His internship was completed in St. Louis, Mo.

He was active in the Masonic Lodge and the W.O.W., having filled many places of trust in both of these fraternal orders. He was a member of the Madison-Suwannee County Medical Society, a life member of the Florida Medical Association and a member of the American Medical Association. He was a shiner and a member of the Methodist church.

For many years Dr. Anderson was president of the Florida Railway Surgeons' Association. He also served for a number of years on the State Board of Medical Examiners.

Soon after coming to Florida he was married

to Malinda Honorine Richard, who survives him. Other survivors include one son, Thomas L. of Waynesboro, Va.; two daughters, Miss Lucretia Anderson of Eustis and Mrs. J. G. Harden of Statesboro, Ga.; one sister, Mrs. Ida A. Green of Miami, as well as a number of grandchildren and one great grandchild. His brother, Dr. L. M. Anderson of Lake City, died in December 1938.

Dr. Anderson took an active interest in organized medicine. Two years ago, though in failing health, he attended the convention held at Daytona Beach. With his passing, the Association lost one of its oldest, staunchest members.

CHARLES ROE MARNEY

Dr. Charles R. Marney of Tampa died on September 17, at the age of 59.

Born in Waterloo, Ill., Dr. Marney came to Florida in 1900, working as conductor for the Seaboard Airline Railway until he entered Emory Medical College. After his graduation in 1913, he served an internship in the New York Nursery and Child's Hospital and at Kings County Hospital, Brooklyn. He opened offices in Tampa in January, 1916.

During the World War, Dr. Marney served in the Medical Corps of Evacuation Hospital 20 in France.

He was past president of the Hillsborough County Medical Society, a member of the Florida Medical Association and the American Medical Association; a member of the St. John's Episcopal Church, the Tampa Chapter of Royal Arch Masons, and secretary of the Order of Railway Conductors.

Surviving is his widow, Elsie Sheaffer Marney, to whom he was married in February 1918 at Lewiston, Pa.

ALFRED THEODORE EIDE

Dr. A. T. Eide, 56, Lake Placid physician and former Representative in the Legislature from Highlands county, died at the Bay Pines Hospital, Sunday, September 7, following an illness of several months.

Dr. Eide, who was born in Morris, Ill., received his medical education at the Chicago College of Medicine and Surgery, from which he was graduated in 1908. He served as Captain of the

Medical Corps in the United States Army during the World War.

In 1927 Dr. Eide located in Lake Placid where he built up a large practice. He was a state Representative from his district in 1937 and was active in civic affairs. He was a member of the American Legion, Masons and Eastern Star; a member of the DeSoto-Hardee-Highlands County Medical Society, the Florida Medical Association, and a Fellow of the American Medical Association.

Survivors are his widow; two daughters, Elaine and Marian; and two sons, Alfred Jr., and Howard of Lake Placid; and his mother, two sisters and a brother of Chicago.

COMPONENT COUNTY SOCIETIES

DADE

The members of the Dade County Medical Society were guests of the Medical Officers at the Opa Locka Naval Air Station on the evening of October 8. After a sight-seeing tour, a short business meeting was held, followed by a scientific program presented by the host physicians.

On October 25 the Society held its annual picnic at Fisher's Island.

DUVAL

The Duval County Medical Society held its regular meeting at the State Board of Health Building on October 7. Dr. Edward Jelks, principal speaker, presented a paper on "Surgical Observations on Diseases of the Spleen," which provoked a great deal of discussion. Dr. W. H. Pickett, State Health Officer, made a report on the work of the Bureau of Narcotics. Dr. T. Z. Cason, chairman of the State Association's Committee on Medical Postgraduate Course, outlined plans for next year's graduate course which will again be held in Jacksonville.

LEON-GADSDEN-LIBERTY-WAKULLA- JEFFERSON

Dr. G. H. Garmany of Tallahassee was elected president of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society at a meeting held at Wakulla Springs on October 16. Other officers include Dr. W. G. Miles of Chattahoochee, vice president, and Dr. B. A. Wilkin-

son, Tallahassee, re-elected secretary and treasurer.

Speakers on the program included Dr. James M. Bryant of Jacksonville, Dr. F. V. Gammage of Chattahoochee, and Dr. M. R. Clements of Tallahassee.

The day's program ended with a dinner at Wakulla lodge.

PASCO-HERNANDO-CITRUS

Dr. S. C. Harvard of Brooksville entertained the members of the Pasco-Hernando-Citrus County Medical Society at an outdoor steak fry on the evening of October 9. After dinner a scientific program was held in his office, at which time four interesting case reports were discussed. Dr. Claude L. Carter of Inverness invited the members to be his guests at the November meeting.

Present on this delightful occasion were the following members:

Drs. A. C. Coogler and George R. Creekmore of Brooksville, Dr. H. Durham Young of Bushnell, Dr. William B. Moon of Crystal River, Dr. W. Wardlaw Jones of Dade City, Dr. Claude L. Carter of Inverness, Dr. William H. Walters of Lacoochee, Dr. J. T. Bradshaw of San Antonio; and special guests Drs. James T. Cowart and David R. Murphey of Tampa and Dr. H. Surgeon Cherry of Center Hill.

PINELLAS

The Pinellas County Medical Society held its annual corporation meeting at the Shrine Club, St. Petersburg, on October 17. Dr. N. W. Gable, Jr. presided. The report of the treasurer as of October 1 was read and accepted. Reports of regular committees were then heard.

An election of officers was held, which resulted as follows: president (by advance from president-elect), M. A. Nickle; president-elect, W. C. McConnell; first vice president, W. Glenn Post, Jr.; second vice president, J. A. Hardenbergh; secretary-treasurer, O. O. Feaster; censors, R. W. S. Owen, G. Timberlake; delegates to annual convention, W. M. Davis, A. J. Wood, A. L. Mills, J. A. Herring, O. O. Feaster; alternate delegates, N. M. Marr, R. H. Knowlton, A. R. Frederick, W. P. Farber and F. F. Kumm.

Dr. Nickle presented the past president's plaque to Dr. Gable and an additional plaque to Dr. A. S. Anderson who had served as executive officer owing to the absence of Dr. Gable who is in military service.

How to Use S-M-A Powder

EACH PACKAGE OF S-M-A* CONTAINS ONE MEASURING CUP



1 Empty one tightly packed measuring cup of S-M-A powder into bottle.



2 Add enough warm previously boiled water to make one ounce.

3 Cap bottle and shake powder into solution. Feed at body temperature.



4 Easy, isn't it?



S-M-A READY TO FEED PROVIDES:

• 20 calories to the ounce, but more important, the nutritional value of S-M-A is that of a complete well-balanced food. When prepared as above, each quart provides:

10 mg. Iron and Ammonium Citrate
200 I. U. of vitamin B₁
400 I. U. of vitamin D
7500 I. U. of vitamin A

NORMAL INFANTS RELISH S-M-A—DIGEST IT EASILY AND THRIVE ON IT

*S-M-A, a trade mark of S-M-A Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addi-



tion of milk sugar and potassium chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

S. M. A. CORPORATION • 8100 McCORMICK BOULEVARD • CHICAGO, ILLINOIS

After a discussion it was voted to resume the holding of two meetings a month, one to be a dinner meeting and the other to convene at 8 o'clock. The first and third Fridays were chosen as meeting dates.

POLK

Dr. R. C. Cumming of the Lakeland Air School was guest speaker at a meeting of the Polk County Medical Society held in the Lake Region Hotel, Winter Haven, on October 8. He gave an intensely interesting talk on "A General Survey on the Health and Diet of English and American Cadets."

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

PRESENT STATUS OF RADIATION THERAPY IN NASAL SINUSITIS, LEVIN, ALFRED G., MIAMI, ARCH. PHYS. THERAPY 22:217-219 & 222-224 (APRIL) 1941.

Laboratory studies have shown that the value of roentgen treatment is primarily due to the early destruction of lymphocytes with resultant release of antibodies, enzymes and other protective substances. A heavier infiltration of phagocytes and increased phagocytosis is also produced.

Acute infection of the sinus usually clears promptly when treated conservatively, although convalescence may be hastened by radiation if small doses are employed after careful shrinkage of the mucous membrane.

The involved mucous membranes in subacute sinusitis are highly radiosensitive owing to the presence of large numbers of lymphocytes, and can be effectively shrunk by roentgen therapy. This type of sinusitis is probably affected more readily than any other type.

In chronic sinusitis with hyperplastic membranes or early polyp formation, the thickened mucosa is heavily infiltrated with lymphocytes and responds almost as readily to radiation as in the subacute type.

In chronic sinusitis with extensive scar tissue or polyp formation there is relatively little cellular infiltration and results are only fair.

In atrophic sinusitis no benefit is obtained from radiation.

The most striking results of radiation therapy are obtained in children and young adults.

PRESENT STATUS OF SHORT WAVE DIATHERMY IN THE TREATMENT OF NASAL SINUSITIS, HOLLENDER, A. R., MIAMI BEACH, EYE, EAR, NOSE & THROAT MONTHLY, SEPT. 1940.

The author stresses the necessity for selecting the cases to be treated by means of short wave diathermy. The frontal and maxillary sinuses may be readily reached with short wave exposure; the posterior sinuses, however, are but little affected by this method of treatment, if affected at all.

Short wave diathermy is not sufficiently effective to replace other methods of treatment and should be used only as an adjunct to other accepted therapy. Hyperplastic and allergic sinuses are not affected by short wave treatment.

The best results from this treatment are obtained in acute sinusitis, but even here it is insufficient in itself to replace the conventional procedures.

FOLLICULAR CONJUNCTIVITIS IN SCHOOL CHILDREN AS EXPRESSION OF VITAMIN A DEFICIENCY, SANDELS, M. R.; CATE, H. D.; WILKINSON, K. P., AND GRAVES L. J., TALLAHASSEE, AM. J. DIS. CHILD. 62:101 (JULY) 1941.

Sandels and her co-workers studied the effect of supplementary vitamin A on the conjunctival folliculosis of 119 school children. Twenty-one of the 22 children who received supplementary vitamin A showed improvement; 11 of them were entirely free of follicular conjunctivitis at the end of nine weeks of observation. There was no improvement in 17 control children observed over the same period. All of the 60 children given graduated amounts of vitamin A were improved, and 40 were entirely free of the conjunctivitis in twelve weeks. Of 20 children who received no supplementary vitamin during a similar period, only the 2 who had received a more liberal diet showed any improvement. Children who received 13,000 U. S. P. units of vitamin A improved at approximately the same rate as did those who received 25,000 or 38,000 units. Apparently time is a factor limiting the rate of healing, and excessive doses of vitamin A do not increase this rate proportionately. A concentrate of vitamin A esters containing a negligible amount of vitamin D produced as rapid improvement as did a concentrate containing vitamin D. A survey of the diets of 58 children, 42 of whom had follicular conjunctivitis and 16 who did not, shows that the deficiency developed with a diet



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.

PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

For the Local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*
Wyeth

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

having a vitamin A content of less than 100 U. S. P. units per kilogram of body weight daily. The survey suggests that diets in which carotene furnishes a large proportion of the vitamin A value from 200 to 250 U. S. P. units of vitamin A per kilogram of body weight a day will not provide a too generous allowance for children between 6 and 12 years of age. The presence or absence of follicular conjunctivitis as an indication of vitamin A nutrition is a more reliable measure for children from 6 to 12 years of age than it is for older boys and girls.

ADVERTISERS' NOTES

SIGNIFICANCE OF COUNCIL SEALS

If they could talk, Council Seals would say:

"When you see one of us on a package of medicine or food, it means first of all that the manufacturer thought enough of the product to be willing to have it and his claims carefully examined by a board of critical, unbiased experts . . . We're glad to tell you that this product was examined, that the manufacturer was willing to listen to criticisms and suggestions the Council made, that he signified his willingness to restrict his advertising claims to *proved* ones, and that he will keep the Council informed of any intended changes in product or claims. . . There may be other similar products as good as this one, but when you see us on a package, *you know*. Why guess, or why take someone's self-interested word? If the product is everything the manufacturer claims, why should he hesitate to submit it to the Council for acceptance?" Mead Johnson Products are Council-Accepted.



PARENTERAL LIVER EXTRACTS

Rapid advancement in knowledge of the anemias and their treatment has resulted in some confusion in terminology of the liver extracts. The active substance effective in pernicious anemia is only a small part of whole liver, but the total solids contained in parenteral solutions vary widely and in Liver Extracts, Lilly, for example, range from only 10 to 15 mg. per U.S.P. units in the case of Solution Liver Extract Purified, Lilly, 15 U.S.P. units per cc., to around 175 mg. of solids per unit in the products containing 1 or 2 U.S.P. units per cc. These solids contain vitamin B₁, riboflavin, pantothenic acid, and unknown amounts of other factors of the vitamin B₂ complex.

A recent revision in labeling these products makes it clear just what the solutions are. The preparations containing the various factors present in whole fresh liver which are suitable for intramuscular injection, are now known as Solution Liver Extract Crude, Lilly, containing 2 injectable U.S.P. units, and 1 U.S.P. unit per cc., both being identical except for dilution. The products containing higher concentration of the antipernicious anemia factor with low total solids, are now designated Solution Liver Extract Purified, Lilly, and are available in concentrations of 15, 10, or 5 injectable U.S.P. units per cc., differing from each other only in dilution.

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

**Building Heated and Ventilated
Psychopathic Annex—Sound Proof
Window Guards Eliminated
Air Conditioned**



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome, H.W.&D.

(dibrom-oxymercuri-fluorescein-sodium)

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

HYNISON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND

**PLEASE MENTION THE JOURNAL
WHEN WRITING TO ADVERTISERS**

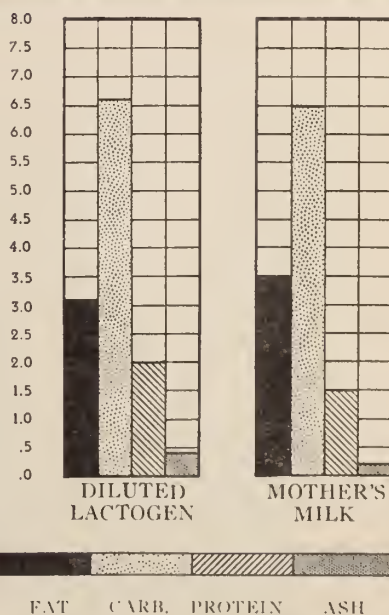


LACTOGEN
approximates
women's milk in the
proportion of
food substances

THE cow's milk used for Lactogen is scientifically modified for infant feeding. This modification is effected by the addition of milk fat and milk sugar in definite proportions. When Lactogen is properly diluted with water it results in a formula containing the food substances — fat, carbohydrate, protein, and ash — in approximately the same proportion as they exist in woman's milk.

No advertising or feeding directions, except to physicians. For free samples and literature, send your professional blank to "Lactogen Department" Nestlé's Milk Products, Inc., 155 East 44th St., New York, N. Y.

"My own belief is, as already stated, that the average well baby thrives best on artificial foods in which the relations of the fat, sugar, and protein in the mixture are similar to those in human milk."—JOHN LOVETT MORSE, A.M., M.D., *Clinical Pediatrics*, p. 156.



NESTLÉ'S MILK PRODUCTS, INC.
155 EAST 44TH ST., NEW YORK, N. Y.

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, PRESIDENT.....Miami
 MRS. F. W. KRUEGER, FIRST VICE-PRESIDENT.....Jacksonville
 MRS. R. L. CLINE, SECOND VICE-PRESIDENT.....Lakeland
 MRS. PAUL KELLS, CORRESPONDING SECRETARY.....Miami
 MRS. C. H. MURPHY, RECORDING SECY.-TREAS.....Bartow
 MRS. M. J. FLIPSE, HISTORIAN.....Miami
 MRS. L. C. INGRAM, PARLIAMENTARIAN.....Orlando

COMMITTEE CHAIRMEN

MBS. S. M. COPELAND, PRESS AND PUBLICITY.....Jacksonville
 MRS. P. J. MANSON, HYGEIA.....Miami
 MRS. RUPERT STOVALL, PUBLIC RELATIONS.....Ft. Lauderdale
 MRS. E. M. HENDRICKS, LEGISLATION.....Ft. Lauderdale
 MRS. GORDON H. IRA, FINANCE.....Jacksonville
 MRS. T. C. KENASTON, EXHIBITS.....Cocoa
 MRS. CLYDE ANDERSON, ARCHIVES.....St. Petersburg
 MRS. GEORGE C. TILLMAN, STUDENT LOAN.....Gainesville
 MRS. F. W. KRUEGER, PROGRAM.....Jacksonville
 MRS. R. L. CLINE, ORGANIZATION.....Lakeland
 MRS. JOHN H. OWENS, BULLETIN.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, NORTH CENTRAL "B".....Gainesville
 MRS. E. W. VEAL, NORTHEAST "C".....Jacksonville
 MRS. J. C. GRIFFIN, SOUTHWEST "D".....Tampa
 MRS. W. C. PAGE, SOUTH CENTRAL "E".....Cocoa
 MRS. HILLARD WILLIS, SOUTHEAST "F".....Coral Gables

DISTRICT MEETINGS

GAINESVILLE DISTRICT MEETING

The Woman's Auxiliary met in conjunction with the North Central Medical District at the Hotel Thomas, on October 3, at 2:30 p.m.

A brief session was presided over by Mrs. T. A. Snow, local president, who introduced Mrs. W. J. Barge, state president. Mrs. Barge made an interesting talk on the activities of the Auxiliary. She recognized the state officers and chairmen present and asked each one to stand and say a word. She then gave a summary of the highlights of the National Convention held in Cleveland, and urged members to subscribe to The Bulletin and to cooperate with the national defense program. Mrs. G. C. Tillman presented Mrs. Barge with a beautiful corsage on behalf of the Alachua County Medical Auxiliary.

A delightful program in charge of Mrs. W. C. Thomas was as follows: piano solos—Consolation No. 6 (*Liszt*), Valse Oublie (*Liszt*), Rhapsody (*Donanyi*), Mrs. Horton Hobbs.

Vocal solos—O Dry Those Tears, Knowest Thou Not That Fair Land, from the opera Mignou, Mrs. H. O. Alford, accompanied by Mrs. Thomas.

Readings—High Culture in Dixie and Life of a Doctor's Wife, Mrs. Snow; vocal solos—The Unforseen (*Scott*) and My Lover is a Fisherman (*Stricklang*), Mrs. R. A. Edwards, accompanied by Mrs. Hobbs.

.... in Miami, Florida

SUN-RAY PARK
HEALTH RESORT

ESTABLISHED IN 1928



REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
 For Rest, Convalescent, Chronic
 and Acute Medical Cases

Separate Buildings and
 SPECIAL FACILITIES
 for Mild Mental, Alcoholic
 and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
 Physician, Complete Physical Therapy, Four
 Acres Beautifully Landscaped Grounds, Sports,
 Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida

Cook County
Graduate School of Medicine

(In affiliation with Cook County Hospital)
 Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, starting every two weeks. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course in Internal Medicine, and Two Weeks Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

OTO-LARYNGOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of Nervous and Mental Diseases, Alcoholic and Drug Addictions. Especially equipped for the use of **ELECTRO-SHOCK THERAPY**. Elderly people, Convalescents and mild chronic mental cases given very low rates. Too violent and noisy patients not accepted. **DOORS ARE NOT LOCKED.** The Sanitarium is club like.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle *Funeral Director*

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

convention

press

two eighteen west church street
jacksonville, florida



*printers
publishers*



Tea was served by Mrs. Thomas in the lounge from a beautifully appointed table centered with roses. Arrangements for this feature were in charge of Mrs. J. M. Dell, Sr. and her committee. Auxiliary members later joined the doctors for dinner.

ST. AUGUSTINE DISTRICT MEETING

Mrs. Reddin Britt, general chairman, and her associates arranged a delightful program of entertainment for the visiting doctors' wives attending the Fifth Annual Meeting of the Northeast Medical District, with headquarters at the St. Augustine Links and Country Club on October 4.

A luncheon meeting of the State Board of the Woman's Auxiliary and the State Advisory committee of the Florida Medical Association held at the Bennett Hotel, preceded the entertainment features. Immediately following the luncheon, a brief business session was held. Mrs. W. J. Barge, state president, introduced Dr. L. C. Ingram, Orlando, who presided in the absence of Dr. Gordon H. Ira, state chairman of the Advisory Committee. Dr. Ingram spoke on the activities of the various departments of the Auxiliary and presented Dr. Walter C. Jones, president of the Florida Medical Association, who congratulated the Auxiliary on the fine work they are doing. He suggested that the president-elect of the State Association be hereafter invited to attend the State Board meetings so that he could become better acquainted with the activities of the Woman's Auxiliary and know better how to guide and support its objectives before he assumes the office of president.

Mrs. Barge read an outline of the Auxiliary Charges, from Dr. Ira, and Dr. Ingram led in the discussion. These Charges have been approved by the Florida Medical Association and copies sent to each county auxiliary by Dr. Walter C. Jones, state president, to be used as a basis of activities for the year. The Charges are published in this Journal and Mrs. Barge urges every Auxiliary member to study them carefully so that she may become well informed and better prepared to support and cooperate with her own Auxiliary.

On arrival the ladies registered at the Club and received their badges. At 3:30 p.m. a tour was made through the old Spanish treasury or ante bellum home, with its quaint garden. Here tea, cookies and mints were served from a beautifully appointed table overlaid with an exquisite lace cover and centered with a lovely arrangement



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Site High and Healthful Convenient

E. W. ALLEN, M.D., *Department for Men*
H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

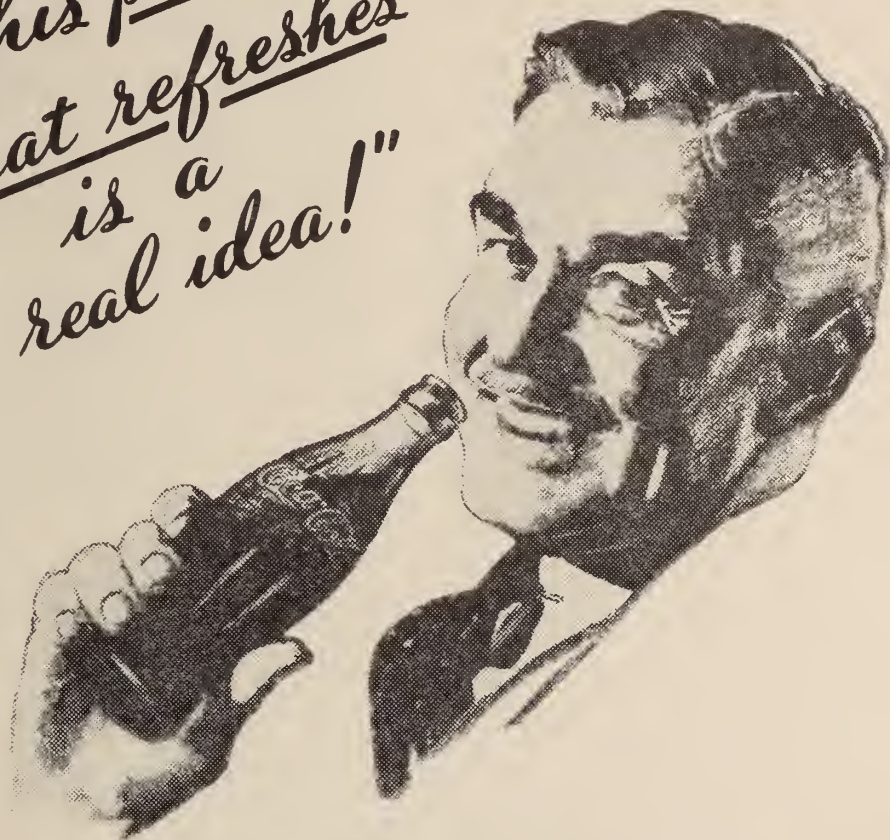
PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

PATRONIZE JOURNAL ADVERTISERS

OUR ADVERTISERS BEAR THE STAMP OF APPROVAL OF THE AMERICAN MEDICAL ASSOCIATION AND ALSO OF THE FLORIDA MEDICAL ASSOCIATION. THEY ARE WORTHY OF THE PATRONAGE OF OUR MEMBERS.

*"This pause
that refreshes
is a
real idea!"*



Ice-cold Coca-Cola, — pure, wholesome and delicious, — has made *the pause that refreshes* America's favorite moment. Everybody welcomes the refreshed feeling, — the happy after-sense of complete refreshment Coca-Cola always brings.



THE PAUSE THAT REFRESHES

of fall flowers. In the evening a Georgia barbecue, with all the usual trimmings was served to the doctors and their wives at the Country Club, climaxing one of the most enjoyable district meetings in the state.

CHARGES—1941

1. Endeavor to have all your members subscribe to and read The Bulletin, the official organ of the Woman's Auxiliary.

2. Continue diligently to distribute the magazine Hygeia.

3. Secure A.M.A. broadcasts over your local station and urge the schools of your county to permit the pupils to listen and make use of them in their science classes.

4. Hold yourself in readiness to cooperate 100 per cent with the Legislative Committee.

5. Hold a fifth annual Health Institute Day, or health programs as best suited to your locality.

6. Cooperate with the Tuberculosis Association, particularly in the Christmas seal sale.

7. Cooperate with the Cancer Field Army.

8. Prepare an interesting exhibit for the State Medical meeting.

9. Appoint a chairman to cooperate with the local defense committee.

10. Stress organization chairman's duty this year. For further information, Mrs. R. L. Cline, 409 Morning-side Drive, Lakeland, Florida, is state chairman this year.

11. Urge attendance at district meetings.

12. Appoint an active Archives chairman to prepare a biography of one or more prominent medical men in your community, either of the present or past, to be filed yearly with Stewart Thompson, managing director of The Florida Medical Association. This information from a historical standpoint will increase in value from year to year.

TO COUNTY AUXILIARY PRESIDENTS:

Now with the beginning of another year of auxiliary work, urge your membership to subscribe for the Bulletin. An informed member is an interested member. It is important for the members of your organization as well as the officers and chairmen who manage its affairs to be well informed. If we are to do our best work, we must know what the Auxiliary is trying to accomplish.

Learn to use your Bulletin. It is the official organ of our organization, just as is the Journal of the American Medical Association for that organization. This year all auxiliary material and official programs of standing committees will be printed in the Bulletin, thus doing away with all former leaflets.

Ask your circulation chairman to approach each member. The Bulletin is published quarterly and is one dollar a year.

Subscriptions should be sent direct to Mrs. Chas. H. Werner, 531 North 24th Street, St. Joseph, Missouri.

Sincerely,
MRS. J. H. OWENS,
State Chairman of A.M.A.
Bulletin.



HYGEIA

The Health
Magazine
for Your
Waiting Room
Table

\$3.00 a Year

HYGEIA promotes confidence and understanding between physician and public. It is your own representative, giving in attractive printed form every month the health teaching you want your patients to have.

DIET	EXERCISE
SANITATION	CHILD CARE
RECREATION	BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION

535 N. Dearborn Street, Chicago

Ambulance Directory

CAREY HAND

32-36 Pine Street
ORLANDO, FLORIDA
Telephone 4181

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

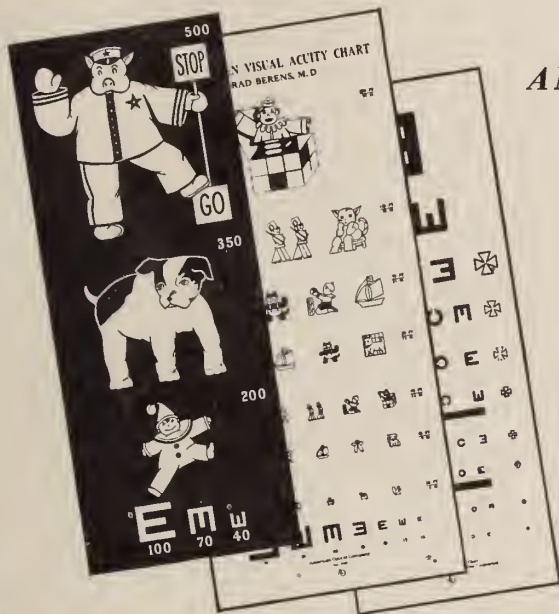
FERGUSON FUNERAL HOME, INC.

1201 South Olive
WEST PALM BEACH, FLA.

Three **VISION TESTING CHARTS** by Dr. Berens

for

**AMBLYOPIA • ASTIGMIA •
SMALL CHILDREN**



These three visual acuity tests in the form of wall charts were designed by Conrad Berens, M.D. They are used in testing amblyopic children and adults, astigmatic patients and visual acuity of small children unable to read. One is a double check distance chart for astigmatism and features the famous Maltese Cross test. The other two are valuable in testing children of pre-school age in that they are designed to stimulate and hold the interest of active young minds.

By AMERICAN OPTICAL COMPANY

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.



It makes their regular check-ups "fun" by giving youngsters some wholesome CHEWING GUM

It's such an easy, thoughtful gesture to always offer your little patients some delicious Chewing Gum while they're waiting or when they leave the office. They just love it — and it makes a big hit with adults, too. And for such a small cost this one, friendly, little act goes a long way in winning extra good will and affection. Besides, as you know, the chewing is an aid to mouth cleanliness as well as helping to lessen tension. Enjoy chewing Gum, yourself. Get a good month's worth for your office today.

**There's a reason, a time
and place for Chewing Gum**

NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS, STATEN ISLAND, NEW YORK

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Walter C. Jones, Miami.....	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest.....	William C. Roberts, Panama City.....	Stewart Thompson, Jacksonville.....	Panama City, 1942
B—North Central.....	Alva T. Cobb, Gainesville.....	" " "	Ocala, 1942
C—Northeast.....	Maximilian Stern, Daytona Beach.....	" " "	Jacksonville, 1942
D—Southwest.....	Howard V. Weems, Sebring.....	" " "	Sarasota, 1942
E—South Central.....	Carl D. Hoffmann, Orlando.....	" " "	Cocoa, 1942
F—Southeast.....	Robert L. Elliston, Ft. Lauderdale.....	" " "	Miami, 1942
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery.....	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta.....	E. D. Shanks, Atlanta.....	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami.....	Palm Beach, Apr. 12-13, 1942
State Dental Society.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	Hollywood, Dec. 8-10, 1941
Soc. of Derm. and Syph.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association.....	J. S. Stewart, Miami.....	J. Ralston Wells, Daytona Beach.....	Daytona Beach, Dec. 4-5, 1941
State Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	
Assn. of Industrial Surgeons.....	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman.....	
Soc. of Ophthal. & Otol.....	S. B. Forbes, Tampa.....	C. E. Dunaway, Miami.....	Palm Beach, Apr. 12-13, 1942
State Nurses Association.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine.....	
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables.....	G. N. Leonard, Miami Beach.....	Hollywood, Nov. 1941
State Pharmaceutical Association.....	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association.....	L. J. Graves, Tallahassee.....	E. M. L'Engle, Jacksonville.....	Orlando, December 4-6, 1941
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association.....	Leland F. Carlton, Tampa.....	W. C. Page, Cocoa.....	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	Fall, 1941
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Gulf Coast Clinical Society.....	J. S. Turberville, Century.....	J. C. McSween, Pensacola.....	
S.E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	Memphis, May, 1942
Southeastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association.....	Paul H. Ringer, Asheville.....	Mr. C. P. Loranz, Birmingham.....	St. Louis, Nov. 11-14, 1941
Suwannee River Medical Society.....	E. C. Crouch, Jasper.....	T. H. Bates, Lake City.....	Lake City, December, 1941

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	W. C. Roberts, M. D. Panama City		12	10	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	W. P. Hixon, M.D. 24 W. Chase St. Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	48	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		7	6	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahatchka	J. R. Norton, M.D. Port St. Joe	3rd Thursday	5	4	A-2-'43 C. D. Whitaker, M.D. Marianna
	Jackson *Calhoun	M. O. Burns, M.D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	Sterling E. Wilhoit, M.D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	41	34	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	11	B-3-'43 J. M. Price, M.D. Live Oak
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		7	100%	
	Taylor *Dixie, Lafayette	Ralph J. Greene, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	
B	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	J. Maxey DeJl, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	31	25	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Marion *Levy	Eugene G. Peek, M.D. Commercial Bk. & Tr. Bldg., Ocala	Harry F. Watt, M.D. Box 146 Ocala	3rd Thursday 12:30 P. M.	27	21	
	Pasco-Hernando- Citrus	William B. Moon, M.D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	100%	
	Duval *Clay, Nassau	S. R. Norris, M.D. Medical Arts Bldg. Jacksonville	F. Gordon King, M.D. 422 St. James Bldg. Jacksonville	1st Tuesday 8:15 P. M.	184	182	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
	St. Johns	A. C. Walkup, M.D. East Coast Hospital St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	
	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganious, M.D. Palatka	2nd Tuesday in Feb., Apr., June, Aug., Oct., Dec. 7:00 P. M.	11	10	C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	42	
	Hillsborough	Robert G. Nelson, M.D. 712 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	108	95	D-7-'43 John R. Boling, M.D. Tampa
	Manatee	W. E. Wentzel, M.D. Box 245, Bradenton	Wm. D. Sugg, M.D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	102	100%	
D	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	16	
	DeSoto-Hardee- Highlands-Char- lotte-Glades	A. T. Eide, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	20	19	D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	M. F. Johnson, M.D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	
	Polk	Bruce R. Tinkler, M.D. Lake Wales	S. Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	64	61	
	Brevard	T. C. Kenaston, M.D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	100%	E-9-'42 Carl D. Hoffmann, M.D. Orlando
	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bk. Bldg. Leesburg	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	20	16	
	Orange *Osceola	Frank D. Gray, M.D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	88	82	
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	11	
	St. Lucie-Okeech- bee-Indian River- Martin	Joseph B. Kollar, M.D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	41	33	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
F	Palm Beach	Wilbur O. Arnold, M.D. Box 1785 W. Palm Beach	William E. Bippus, M.D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	64	
	Dade	C. Larimore Perry, M.D. 525 N. E. 15th St. Miami	Herbert Eichert, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	346	287	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

*Supervise and aid until organized separately.

1930

Tisdall, F. F., Drake, T. G. H., and Brown, A.: A new cereal mixture containing vitamins and mineral elements, *Am. J. Dis. Child.* 40:791-799, Oct. 1930.

1931

Tisdall, F. F.: Dietary factors and health, *Soc. Tr., Am. J. Dis. Child.* 42:1490, Dec. 1931.

1932

Summerfeldt, P.: The value of an increased supply of vitamin B₁ and iron in the diet of children, *Am. J. Dis. Child.* 43:284-290, Feb. 1932.

Morse, J. L.: Pads and fancies in present day pediatrics, *Pennsylvania M. J.* 35:280-285, Feb. 1932.

Henricke, S. G.: The vitamin B complex: Its role in infant feeding in the light of our present knowledge, *Northwest Med.* 31:165-169, April 1932.

Langhorst, H. F.: Vitamins: Their role in the prevention and treatment of disease, *M. J. & Rec.* 135:326-329, April 6, 1932.

Crimm, P. D.: Dietary of Childhood Tuberculosis: Cereal as a source of added mineral and vitamin elements; preliminary report, *J. Indiana M. A.* 25:205-206, May 1932.

Troutt, L.: Quality studies of therapeutic diets: I. The ulcer diet; a committee report, *J. Am. Dietet. A.* 8:25-32, May 1932.

Summerfeldt, P., Tisdall, F. F., and Brown, A.: The curative effects of cereals and biscuits on experimental anaemias, *Canad. M.A. J.* 26:666-669, June 1932.

Sneed, W.: Ununited and delayed union of fractures, *Kentucky M. J.* 30:363-370, July 1932.

Silverman, A. C.: Celiac disease, *New York State J. Med.* 32:1055-1061, Sept. 15, 1932.

Rice, C. V.: Sauerkraut juice for the acidification of evaporated milk in infant feeding, *Arch. Pediat.* 51:390-395, June 1934.

Eder, H. L.: Iron therapy: A routine procedure during infancy, *Arch. Pediat.* 51:701-713, Nov. 1934.

Lynch, H. D.: Fundamentals of infant feeding, *J. Indiana M. A.* 27:571-574, Dec. 1934.

Chaney, M. S., and Ahlborn, M.: Nutrition, Houghton Mifflin Co., Boston, 1934, p. 323.

1935

Bailey, C. W.: Anemia in infants and young children, *J. South Carolina M. A.* 31:54-58, March 1935.

Kugelmass, I. N.: The recent advances in treatment of nutritional disturbances in infancy and childhood, *M. Comment* 17:5-13, March 1, 1935.

Ross, J. R., and Summerfeldt, P.: Value of increased supply of vitamin B₁ and iron in the diet of children: Paper II, *Am. J. Dis. Child.* 49:1185-1188, May 1935.

von Meysenbug, L.: Breast feeding with especial reference to some of its problems, *New Orleans M. & S. J.* 87:738-743, May 1935.

Tarr, E. M., and McNeile, O.: Relation of vitamin B deficiency to metabolic disturbances during pregnancy and lactation, *Am. J. Obst. & Gynec.* 29:811-818, June 1935.

Blatt, M. L., and Schapiro, I. E.: Influence of a special cereal mixture on infant development, *Am. J. Dis. Child.* 50:324-336, Aug. 1935.

Coward, N. B.: Infant feeding, *Nova Scotia M. Bull.* 14:525-532, Oct. 1935.

Tisdall, F. F.: Inadequacy of present dietary standards, *Tr. Sect. Pediat., A.M.A., 1935: Canad. M. A. J.* 33:624-628, Dec. 1935.

Marriott, W. McK.: Infant Nutrition, second edition, C. V. Mosby Co., St. Louis, 1935, p. 202.

Smith, C. H.: Prevention and treatment of nutritional anemia in infancy, *Preventive Med.* 7:115-124, Aug. 1937.

Saxl, N. T.: Pediatrics, in *Dietetics for the Clinician*, edited by M. A. Bridges, third edition, Lea & Febiger, Philadelphia, 1937, pp. 637-639.

Boyd, J. D.: Nutrition of the Infant and Child, National Medical Book Co., Inc., New York, 1937, p. 110.

Brennemann, J.: Practice of Pediatrics, W. F. Prior Co., Inc., Hagerstown, Md., 1937, Vol. 1, Ch. 25, p. 19.

Griffith, J. P. C., and Mitchell, A. G.: The Diseases of Infants and Children, second edition, W. B. Saunders Co., Philadelphia, 1937, pp. 106, 111.

Saxl, N. T.: Pediatric Dietetics, Lea & Febiger, Philadelphia, 1937, pp. 131-133.

1938

Hoffman, S. J., Greenhill, J. P., and Lundeen, E. C.: A premature infant weighing 735 grams and surviving, *J.A.M.A.* 110:283-285, Jan. 22, 1938.

Krasnow, F.: Nutritional influence on teeth, *Am. J. Pub. Health* 28:325-333, March 1938.

Ratner, B.: Round Table discussion on asthma and hay fever in children, *J. Pediat.* 12:399-413, March 1938.

Ratner, B.: Panel discussion on the role of allergy in pediatric practice, *J. Pediat.* 13:582-604, Oct. 1938.

Snelling, C. E.: Nutritional anaemia, *Bull. Acad. Med. Toronto* 12:7-10, Oct. 1938.

Dauphinc, J. A.: The iron requirement in normal nutrition, *Canad. M.A.J.* 39:483-486, Nov. 1938.

Summerfeldt, P., and Ross, J. R.: Value of an increased supply of vitamin B₁ and iron

SCIENTIFIC BACKGROUND

Mead's Cereal was introduced in 1930, and Pablum in 1932, by Mead Johnson & Company. Since then, the growing literature indicates early recognition and continued acceptance of these products and the important pioneer principles they represent.

von Meysenbug, L.: Infant feeding with especial reference to some of its problems during the first year, *Texas State J. Med.* 28:543-547, Dec. 1932.

1933

Wampler, F. J., and Forbes, J. C.: Calcium and phosphorus metabolism in a case of celiac disease, *South. M. J.* 26:555-558, June 1933.

Brown, A., and Tisdall, F. F.: The role of minerals and vitamins in growth and resistance to infection, *Brit. M. J.* 1:55-57, Jan. 14, 1933; Effect of vitamins and the inorganic elements on growth and resistance to disease in children, *Ann. Int. Med.* 7:342-352, Sept. 1933.

Crimm, P. D., Raphael, I. J., and Schnute, L. F.: Diet of tuberculous and non-tuberculous children: Effect of increased supply of vitamin B concentrate and minerals, *Am. J. Dis. Child.* 46:751-756, Oct. 1933.

Smith, A. D.: Consideration of various infants' foods, *Pacific Coast J. Homeop.* 44:463-465, Sept.-Dec. 1933.

1934

Somers, R., Rotton, G. C., and Rowntree, J. I.: Possibilities of improving dental structures, *Soc. Tr., Bull. King Co. M. Soc.* 13:6, Jan. 15, 1934.

Blatt, M. L.: Development of infants on a diet of a special cereal mixture, *Soc. Tr., Am. J. Dis. Child.* 47:918, April 1934.

Rice, C. V.: Anemia of infancy and early childhood, *J. Oklahoma M. A.* 27:125-129, April 1934.

Hawk, W. A.: A few of the commoner feeding problems in infancy, *Univ. Toronto M. J.* 11:218-229, May 1934.

Ross, J. R., and Burrill, L. M.: The effect of cooking on the digestibility of cereals, *J. Pediat.* 4:654-659, May 1934.

Summerfeldt, P.: Iron and its availability in foods, *Tr. Sect. Pediat., A.M.A.* 1935, pp. 214-220.

1936

Dafoe, A. R.: Further history of the care and feeding of the Dionne quintuplets, *Canad. M. A. J.* 34:26-32, Jan. 1936.

Conn, L. C., Vant, J. R., and Malone, M. M.: Some aspects of maternal nutrition, *Surg., Gynec. & Obst.* 62:377-383, Feb. 15, 1936.

Ross, J. R., and Summerfeldt, P.: Haemoglobin of normal children and certain factors influencing its formation, *Canad. M. A. J.* 34:155-158, Feb. 1936.

Smyth, F. S.: Allergic diseases, *J. Pediat.* 8:500-515, April 1936.

Lemmon, J. R.: Problems of the crying infant, *Southwestern Med.* 20:248-250, July 1936.

Rice, C. V.: The success of treating celiac disease from a standpoint of vitamin deficiency, *Arch. Pediat.* 53:626-629, Sept. 1936.

Smith, C. H.: Management of nutritional anemia in infancy, *M. Clin. North America* 20:933-950, Nov. 1936.

Strong, R. A., editor: Nutritional anemia of infants, *Orleans Parish M. Soc. Bull.*, pp. 6-9, Nov. 9, 1936.

Jeans, P. C.: Specific factors in nutrition, Round Table discussion, *J. Pediat.* 9:693-698, Nov. 1936.

Young, J. G.: Meeting the requirements for proper nutrition in infancy, *Texas State J. Med.* 32:531-533, Dec. 1936.

1937

Stearns, G., and Stinger, D.: Iron retention in infancy, *J. Nutrition* 13:127-141, Feb. 1937.

Strong, R. A.: Nutritional anemia, *Mississippi Doctor* 15:13-16, Aug. 1937.

in the diet of children, Paper III, *Am. J. Dis. Child.* 56:985-988, Nov. 1938.

Tisdall, F. F., and Drake, T. G. H.: The utilization of calcium, *J. Nutrition* 16:613-620, Dec. 1938.

Drake, T. G. H.: Introduction of solid foods into the diets of children, *Canad. M. A. J.* 39:573-580, Dec. 1938.

1939

Strong, R. A.: The most frequent causes of vomiting in infancy, *Texas State J. Med.* 34:663-676, Feb. 1939.

Ratner, B., and Gruehl, H. L.: Anaphylactogenic properties of certain cereal foods and breadstuffs: Allergenic denaturation by heat, *Am. J. Dis. Child.* 57:739-758, April 1939.

Monypenny, D.: Early introduction of solid foods in the infant diet, *Soc. Tr., Am. J. Dis. Child.* 58:1144-1145, Nov. 1939.

Brown, A., and Tisdall, F. F.: Common Procedures in the Practice of Paediatrics, third edition, McClelland & Stewart, Ltd., Toronto, 1939, pp. 77-79.

1940

Monypenny, D.: The early introduction of solid foods in the infant diet, *Canad. M. A. J.* 42:137-140, Feb. 1940.

Ratner, B.: Round Table discussion on food allergy, *J. Pediat.* 16:653-672, May 1940.

Rosenbaum, I., Jr.: The management of the allergic child, *Kentucky M. J.* 38:199-203, May 1940.

Davison, W. C.: The Compleat Pediatrician, third edition, Duke University Press, Durham, N. C., 1940, No. 216.

Kugelmass, I. N.: The Newer Nutrition in Pediatric Practice, J. B. Lippincott Co., Philadelphia, 1940, p. 372.

The JOURNAL of the Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XXVIII
No. 6

Jacksonville, Florida, December, 1941

Yearly Subscription, \$3.00
Single Copy, 30c

CONTENTS

Conditions Simulating Appendicitis, Frank G. Slaughter, M.D., Jacksonville.....	265
Rickettsial Diseases in the South, Jack O. W. Rash, M.D., Miami.....	270
The Public Health Control of Gonorrhea, L. C. Gonzalez, M.D., Jacksonville.....	286
Three Cases of Cancer in Children Under Three Years of Age, Henry E. Palmer, M.D., Tallahassee.....	289
Editorials: Preconvention Meeting; Medical Division of Civilian Defense Issues Bulletin No. 2.....	293
Medical District Meetings.....	294
Births.....	296
State News Items.....	296
Component County Societies.....	297
Abstract Department.....	298
Books Received.....	300
Advertisers' Notes.....	300
Woman's Auxiliary.....	302
Index to Advertisements.....	304
State and Sectional Meetings.....	306
Component Societies by Districts.....	307

NEXT SESSIONS

American Medical Association, Atlantic City, 1942
Southern Medical Association, Richmond, November, 1942
Florida Medical Association, Palm Beach, April 13-15, 1942

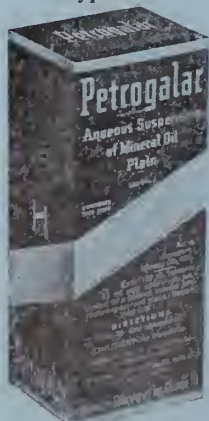
Entered as second-class matter under Act of Congress of March 3, 1879,
at the post office at Jacksonville, Florida, October 23, 1924



For the Stay-at-Home

★★ Petrogalar^{*}

★
Available at all
Pharmacies
in 5 Types



Shut in—No exercise—Appetite off—Sluggish bowel, all suggest the use of Petrogalar to assist Bowel Habit Time.

Petrogalar Plain adds unabsorbable fluid to the bowel content to encourage regular, comfortable elimination by purely mechanical means, free of habit-forming tendencies.

Children and adults alike enjoy the delightful flavor of Petrogalar. It is easy to take, either from a spoon or in water, as desired.

^{*}Trade Mark. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains pure mineral oil suspended in an aqueous jelly containing agar and acacia.

Petrogalar Laboratories, Inc. • 3134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



there's a certain attraction

Minerals and vitamins seem to have an attraction for each other too. Vitamin D requirements are dependent upon the presence of calcium and phosphorus.¹ Vitamin D is also more effective, especially in tooth development, when vitamin A and these minerals are present.² Vitamin B₁ acts directly on mineral and total metabolism,³ and vitamin A and iron are related in effects on the hematopoietic system.⁴

Cocomalt

Enriched Food Drink



COCOMALT contains significant amounts of vitamin A, B₁ and D, together with the important minerals calcium, phosphorus and iron. Controlled studies have shown that COCOMALT increases hemoglobin and tends to improve the general health picture. Many physicians recommend COCOMALT for both young and old because when mixed with milk it combines these body essentials in a tasty, delightful drink.

R. B. DAVIS COMPANY
HOBOKEN NEW JERSEY

1 Elvehjem, C. A. — Nutritional Requirements of Man — Ind. & Eng. Chem., June 1941.

2 McCollum, E. V. — The Newer Knowledge of Nutrition — 5th Ed., 1939, p. 392.

3 McLester, J. S. — Nutrition and Diet in Health & Disease — 3rd Ed., 1939, p. 91.

4 McCollum, E. V. — The Newer Knowledge of Nutrition — 5th Ed., 1939, p. 320.

86c out of each \$1.00 gross income used
for members' benefit

**PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION**

Hospital, Accident, Sickness



INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

39 years under same management

**\$2,000,000 INVESTED ASSETS
\$10,000,000 PAID FOR CLAIMS**

\$200,000 deposited with State of Nebraska for
protection of our members

Disability need not be incurred in line of duty—benefits
from the beginning day of disability

Send for application, Doctor, to

**400 First National Bank Building
OMAHA, NEBRASKA**



BRAWNER'S SANITARIUM

Established 1910

**SMYRNA, GEORGIA
(Suburb of Atlanta)**

*For Nervous and Mental Disorders
Drug and Alcohol Addiction.*

Approved diagnostic and therapeutic
methods.

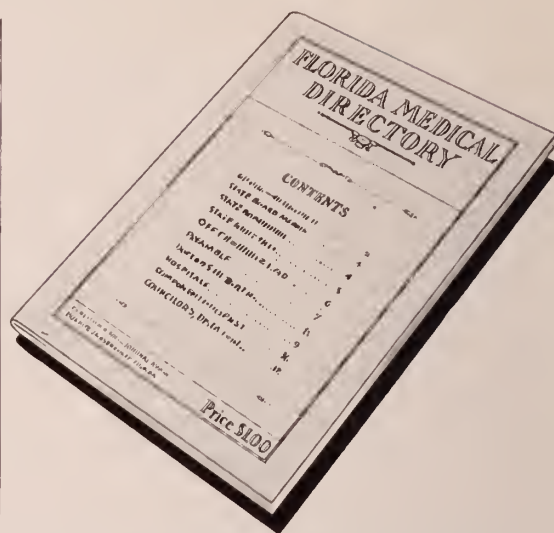
Metrazol and Electro-shock in selected
cases.

Special Department for General Invalids
and Senile Cases at Monthly Rates

JAMES N. BRAWNER, M.D., Medical Director

ALBERT F. BRAWNER, M.D., Department for Men

JAMES N. BRAWNER, JR., M.D., Department for
Women.



1941 DIRECTORY

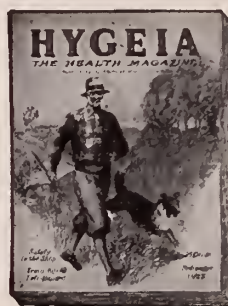
The latest published list of members of the medical
profession in Florida. Medical laws, a list of
approved hospitals and other valuable data are
included in this publication. ORDER YOUR COPY
NOW.

**FLORIDA MEDICAL ASSOCIATION
Jacksonville, Florida**

Please send me one copy of the fourth edition
of the Florida Medical Directory. Enclosed is
One Dollar (\$1.00).

Name

Address



HYGEIA

**The Health
Magazine
for Your
Waiting Room
Table**

\$3.00 a Year

HYGEIA promotes confidence and understanding
between physician and public. It is your own
representative, giving in attractive printed form
every month the health teaching you want your
patients to have.

DIET

EXERCISE

SANITATION

CHILD CARE

RECREATION


BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

**Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION**

535 N. Dearborn Street, Chicago



The Sickle Has Lost Its Edge

SLOWLY BUT SURELY, MEDICAL SCIENCE IS CONQUERING SYPHILIS

Mapharsen offers a record for effectiveness and safety as an antiluetic which has not been surpassed by any other arsenical since the days of Ehrlich. The proof lies in the more than ten million intravenous injections administered over a seven year period.

Directly spirocheticidal without chemical change within the body, Mapharsen exhibits relatively constant parasitocidal value. It makes possible intensive action against the spirochete with comparatively small doses of arsenic. Untoward reactions are fewer and less severe than those attending use of arsphenamine and neoarsphenamine.

Convenience and ease mark the preparation of Mapharsen solutions. Mapharsen dissolves readily in distilled water to form a neutral solution isotonic with the blood—no neutralization required.

Mapharsen (meta-amino-para-hydroxy-phenylarsine oxide hydrochloride) contains 29 per cent arsenic in trivalent form. It does not become more toxic in the ampoule, in the solution, in the body, or when exposed to air.

Supplied in 0.04 Gm. and 0.06 Gm. single-dose ampoules, and in 0.4 Gm. and 0.6 Gm. multiple-dose (10 dose) ampoules.

M A P H A R S E N

A product of modern research offered
to the medical profession by

PARKE, DAVIS & COMPANY
DETROIT, MICHIGAN

Over 75 Years of Service



to Medicine and Pharmacy



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of Nervous and Mental Diseases, Alcoholic and Drug Addictions. Especially equipped for the use of **ELECTRO-SHOCK THERAPY**. Elderly people, Convalescents and mild chronic mental cases given very low rates. Too violent and noisy patients not accepted. **DOORS ARE NOT LOCKED**. The Sanitarium is club like.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

B. MARIAN BEALS
President-Treasurer

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

SEPARATE DEPARTMENTS

**Building Heated and Ventilated
Psychopathic Annex—Sound Proof
Window Guards Eliminated
Air Conditioned**



LOW MONTHLY RATES

North Miami Ave. at 79th St.

Telephone 7-1824

Resident Neuropsychiatrist

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES
SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, starting every two weeks. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.
MEDICINE—Two Weeks Intensive Course in Internal Medicine, and Two Weeks Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.
FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.
GYNECOLOGY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Clinical and Diagnostic Courses every week.
OBSTETRICS—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.
OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.
OPHTHALMOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.
ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.
GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

FROM 黄麻 TO RACÉPHEDRINE

(SYNTHETIC EPHEDRINE)



From the Chinese herb 黄麻 (ma huang) is obtained l-ephedrine, the form of the alkaloid commonly used to relieve nasal congestion.

Racéphedrine is a synthetic form of ephedrine but differs in that it is a racemic combination of equal parts of l-ephedrine and d-ephedrine.

Applied topically to the nasal mucous membranes, it produces prompt and prolonged vasoconstriction and decongestion.

It is comparatively free from undesirable side actions, and its vehicle is soothing and nonirritating. This is of particular value in pediatrics.

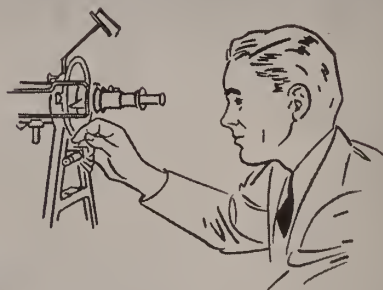
RACÉPHEDRINE HYDROCHLORIDE (UPJOHN)

Supplied in the following forms:

Solution Racéphedrine Hydrochloride (Upjohn) 1% in Modified Ringer's Solution, in one ounce dropper bottles for prescription purposes, and in pint bottles for office use

Capsules Racéphedrine Hydrochloride (Upjohn), $\frac{3}{8}$ grain, in bottles of 40 and 250 capsules

Powder Racéphedrine Hydrochloride (Upjohn), in $\frac{1}{4}$ ounce bottles



Upjohn

KALAMAZOO, MICHIGAN



Fine Pharmaceuticals Since 1886



W. H. Mills
PRESIDENT
Ira Mosher
VICE PRES. AND GENERAL MANAGER
Chas. J. ...
VICE PRESIDENT
E. E. Williams
TREASURER

At this Holiday Season
we extend our Cordial Thanks for
the many Evidences of your Friendship
during the Past Year.

True Vision eventually will bring true
appreciation of the professional knowledge
and skill required in examining, refracting,
prescribing and/or interpreting, fitting and
servicing. Glasses will be rightfully thought of
as therapeutic devices prescribed when neces-
sary to produce visual efficiency.

At this Christmastide we pledge our
continued effort toward creating True
Vision the American Way.

American Optical Company

.... in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928

REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Four
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Convenient
Site High and Healthful

E. W. ALLEN, M.D., Department for Men
H. D. ALLEN, M.D., Department for Women

Terms Reasonable

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE *Florida Medical Ass'n Convention* APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

HAVE YOU THESE FACTS ON

Recent U. S. government reports indicate a considerable increase in cigarette smoking. As physicians realize, this is a natural development during times of public tension.

This situation, and the advent of recent and very significant research, have greatly increased the interest of the profession in the subject of cigarette smoking.

Naturally, situations arise in which a physician may find it desirable to modify his patients' smoking hygiene. But in any case, the physician is concerned about the smoke itself, the principal carrier of physiologically reactive substances.

Scientific authorities in general agree that the constituent of cigarette smoke with the greatest physiologic significance is nicotine. Any reduction of this substance in a patient's smoking is considered desirable by most physicians.

When the modification of a patient's smoking is indicated, here are facts which should be of interest to you:

The makers of Camel cigarettes arranged for independent tests on 5 of the largest-selling brands of cigarettes. The rate of burning

CONSIDERED CIGARETTE SMOKING?

and the nicotine content of the smoke of Camels were compared to the averages of the other brands tested.

The results paralleled the findings of prominent medical—scientific authorities.* Here is the most important conclusion:

THE SLOWER-BURNING CIGARETTE PRODUCES LESS NICOTINE IN THE SMOKE

This research also suggests that by advising patients to smoke slower-burning Camels, it is possible to reduce the nicotine content of cigarette smoke *without sacrifice of smoking pleasure*. Thus, the patient's cooperation is assured.

A RECENT ARTICLE by a well-known physician in a leading national medical journal** presents new and important information on this subject, together with other data on the significance of the burning rate of cigarettes. There is a comprehensive bibliography. Let us send you this impressive article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

*J.A.M.A., Vol. 93, No. 15, p. 1110, Oct. 12, 1929

~ Bruckner, Die Biochemie des Tabaks, 1936

**The Military Surgeon, Vol. 89, No. 1, p. 7, July, 1941



The ethical relationship which exists among physicians has its counterpart in the Lilly policy of close co-operation with the doctor. Distribution of information concerning Lilly Products is restricted to the medical and allied professions.

LIVER EXTRACTS

Crude or Purified For Intramuscular Injection

SOLUTION LIVER EXTRACT CRUDE,
LILLY

2 injectable U.S.P. units per cc.
1 injectable U.S.P. unit per cc.

SOLUTION LIVER EXTRACT PURIFIED,
LILLY

15 injectable U.S.P. units per cc.
10 injectable U.S.P. units per cc.
5 injectable U.S.P. units per cc.

ELI LILLY AND COMPANY

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, December, 1941

Number 6

CONDITIONS SIMULATING APPENDICITIS

FRANK G. SLAUGHTER, M.D.

JACKSONVILLE

To discuss all the causes of abdominal pain on the right side would be a task bordering upon the herculean. It is not my purpose in this paper to discuss such intraperitoneal and extraperitoneal factors, but rather to direct attention to several conditions seldom considered in differential diagnosis which may closely resemble or even be clinically indistinguishable from appendicitis. Specifically, I shall discuss acute and chronic mesenteric lymphadenitis, hemorrhage from the ovaries associated with ovulation and the rupture of the corpus luteum, regional ileitis and parasitic disease of the intestine, particularly amebiasis.

Acute mesenteric lymphadenitis is a disease of children and young adults, characterized by swelling of the mesenteric lymph nodes, particularly those of the lower portion of the ileum. It constitutes a definite clinical entity, which is usually not recognized until an operation for acute appendicitis is performed. When its presence is considered, diagnosis can frequently be made before operation. Why the lymph nodes of the mesentery should become swollen and inflamed is not clearly understood. Certainly there is some relation to infection of the lymphoid tissue elsewhere in the body, and some observers believe that enlargement of the mesenteric nodes is merely part of a general lymphatic involvement. In support of this theory there is the frequently observed fact that in children with enlargement of the mesenteric nodes there is likely to be involvement of the tonsils and lymph glands of the neck. There appears, however, to be some causal relationship between the appendix and the involved mesenteric nodes since concurrent disease of the appendix occurs frequently. It would also appear that other factors related to the intestine itself, such as stasis, ptosis and faulty function of the intestine, play a part. This observation is substantiated by the work of

Arnold,¹ who demonstrated that great changes could be obtained in the flora of the intestinal canal merely by changing the hydrogen ion concentration of the intestinal contents, by feeding a protein meal or adding other food substances, and even by changing the temperature of the room. He showed that many organisms penetrate the walls of the intestine, to be destroyed in the lymph nodes and in the liver. It would appear, then, that minor changes in the intestinal contents may subject the mesenteric lymph nodes to attack by a host of organisms which might easily cause the enlargement noted in acute mesenteric lymphadenitis.

The symptoms of acute inflammation of the mesenteric lymph nodes closely simulate those of appendicitis, and this disease may be clinically indistinguishable from it. The child begins to complain, rather suddenly, of generalized abdominal pain which tends to localize in the right lower quadrant of the abdomen, but not quite to the extent usually found in appendicitis. Abdominal pain in children is, however, notoriously deceptive; so too much significance cannot be attached to this symptom. There may or may not be nausea and vomiting. The temperature tends to rise higher than in appendicitis, and the white blood count is rather high, frequently being from 18,000 to 20,000. The child does not appear to be as sick as would be expected with such a count from appendicitis, and on examination the tenderness is more diffuse, and there is less tendency to rigidity. A sign which has been noted by some observers is that of tenderness diagonally upwards and to the left from McBurney's point along the course of the mesentery of the small intestine.

In five cases of mesenteric lymphadenitis the patients have been operated upon at the Riverside Hospital in the last four years. The report of one case, which was typical, follows:

Case 1. J. K., a boy aged 5, was first seen on June 6, 1940. He had been well until about two hours before admission, when he suddenly began to complain of severe abdominal pain, but did not vomit. When it was discovered that he had fever, he was brought to the hospital.

Physical examination revealed a temperature of 102.4 F.; the pulse rate was 120 and the respiratory rate was 20. The pharynx appeared to be normal. Examination of the abdomen was difficult because of great voluntary rigidity. The impression was gained that even light palpation in the right lower quadrant caused discomfort and

Read before the Sixty-Eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, April 28, 29 and 30, 1941.

the patient tended to lie in his mother's arm with knees drawn up. The white cell count was 11,250 with polymorphonuclears 85 per cent.

A diagnosis of acute appendicitis was made. At operation the entire lower portion of the ileum and the cecum, including the appendix, were red, the vessels were injected and there was evidently an acute process involving this entire area. The mesenteric glands of the ileum, the appendix and the first portion of the cecum were enlarged, one gland being as large as one's thumb. The appendix and one enlarged gland were removed.

The postoperative course was uncomplicated. The temperature subsided slowly and reached normal on the fifth day.

The pathologist's report revealed that the wall of the appendix contained a variety of inflammatory changes with ulcerations, hemorrhages and infiltrations by inflammatory cells. The vessels of the serous coat were distended and engorged. The tissue of the lymph gland contained hyperplastic follicles. The diagnosis of the pathologist was acute catarrhal appendicitis and hyperplastic lymph node.

The finding in this case of what appeared to be a grossly normal appendix which on microscopic examination showed definite inflammatory changes is a common occurrence. Various observers noted such microscopic evidence of disease of the appendix in as high as 90 per cent of the cases of mesenteric lymphadenitis. It must be remembered that there is a preponderance of lymphoid tissue in the appendix itself. It is therefore reasonable to suppose that the acute changes noted in the appendix are only a part of the general lymphoid involvement, rather than a primary cause. Certainly few of these enlarged nodes are tuberculous as was formerly thought to be true.

It is likely that many cases ordinarily diagnosed as chronic appendicitis are really cases of chronic mesenteric lymphoid enlargement, or certainly recurrent mild attacks. The report follows of a case that illustrates this conclusion well.

Case 2. R. B., a boy aged 10, for several years had been having recurrent attacks of generalized abdominal pain with nausea and sometimes vomiting. He was seen in several attacks, the temperature usually being about 99.6 F. and the tenderness mild and not localized. The highest white cell count was 8,100 with polymorphonuclears 44 per cent. Attacks continued, becoming so frequent that he was out of school most of the time. The family was advised that an appendectomy should be performed as a prophylactic measure.

On Dec. 4, 1940, the patient was operated upon. The appendix was short and rather boggy, but was not tied down by adhesions. It was hanging free in the peritoneal cavity. The lymph glands of the mesentery and terminal portion of the ileum were noticeably enlarged, several being the size of one's thumb. The appendix was removed.

The postoperative course was normal. There was a rise in temperature to as high as 99.6 F. during the first twenty-four hours.

The pathologist reported that the mucous membrane of the appendix was marked by diffuse and small hemorrhages, some of them occurring in the deep follicles, which were very large. A diagnosis of subacute ulcerative appendicitis was made.

Since the operation this child has been completely rid of pain. Statistics show that as many

as 40 per cent of the cases of this type are relieved following appendectomy; operation is, therefore, indicated in the absence of grave contraindications.

Hemorrhage from the ovary often presents a picture which is confused with that of appendicitis. Two general causes of ovarian hemorrhage must be considered. The first is that occurring at the time of ovulation when bleeding varying in amount may occur through the stigma where the ovum escapes from the graafian follicle. The second condition is rupture of the corpus luteum with attendant hemorrhage.

Most physicians are familiar with the clinical picture of blood in the peritoneal cavity, particularly the pelvis. There occurs generalized abdominal pain, frequently associated with nausea and vomiting, with tenderness low down in the abdomen, leukocytosis and some fever, and a rapid blood sedimentation rate. The symptoms are usually most intense in the right lower quadrant of the abdomen, and tenderness is greater on the right side. On pelvic examination the clot-surrounded ovary may be felt as a vague mass which strongly suggests ectopic pregnancy.

Hemorrhage occurring through the stigma at the time of ovulation is liable to be slight, and symptoms are usually mild. By keeping in mind the time relationships in the menstrual cycle, one can usually determine whether it is with ovulation, or with rupture of a corpus luteum that one is dealing. What appears to be a mild appendical attack occurring at approximately the middle of the menstrual cycle may well be from rupture of a follicle and should always be regarded with suspicion. Cases of this kind require operation for closure of the point of rupture only in exceptional instances. The mildness of the symptoms, the rapid subsidence of the white cell count and temperature, and the tendency of the sedimentation rate to be rapid usually make the diagnosis certain. Careful analysis of the history is essential.

Rupture of the corpus luteum usually occurs just before or in the first days of menstruation. It is liable to cause symptoms much more severe than those occurring with ovulation. The amount of blood is usually greater and occasionally a hemorrhage of alarming proportions occurs. There is usually a history of trauma, followed by intense pain in the pelvis and lower part of the abdomen with a varying amount of shock, some-

times resembling that of rupture of an ectopic pregnancy.

The lack of definite localizing signs, the presence of some evidence of shock and particularly the appreciable increase in the sedimentation rate all suggest hemorrhage into the pelvis. When a fairly certain diagnosis can be made and there is no gross evidence of shock, it is better to treat the patient conservatively since only occasionally is the hemorrhage really dangerous. If, however, a reasonable doubt exists, it is always better to operate to rule out the appendix. Removal of the bleeding ovary should be avoided if at all possible. In practically every case it is possible to strip out the cyst of the corpus luteum and close over the bleeding area, or in extreme cases a segmental resection can be done. Nothing is to be condemned more than the practice of needlessly sacrificing the ovaries of young women to the "furor operativus."

There follows the report of a case illustrative of hemorrhage from a ruptured graafian follicle:

Case 3. Mrs. J. A., aged 23, was admitted to the hospital on April 11, 1939, complaining of severe generalized abdominal pain beginning four hours before admission and associated with nausea and vomiting. The pain shortly became localized in the right lower quadrant of the abdomen. The last menstrual period had occurred exactly fourteen days before.

On examination, the temperature was 99.4 F. The pulse rate was 100 and the respiratory rate 20. The blood pressure was 110 systolic and 70 diastolic. There was a considerable degree of tenderness in the lower part of the abdomen with rigidity. The white cell count was 24,600 with polymorphonuclears 90 per cent. It was suspected that this might be a condition other than acute appendicitis, and operation was advised.

At operation it was revealed that the abdominal cavity, chiefly the right lower quadrant and the pelvis, was filled with fresh blood and an old clot. The cause of the hemorrhage was a hemorrhagic cyst on the right ovary, possibly from a ruptured graafian follicle or from a rapidly developing corpus hemorrhagicum. The appendix was removed, the hemorrhagic cyst of the right ovary was excised and the defect was closed with a continuous suture.

Another case presented a similar picture, with the appendix secondarily inflamed from peritoneal irritation and a hemorrhagic cyst on the ovary with old blood in the pelvis. It is interesting that in the case reported a large hemorrhage occurred, possibly from rupture of a graafian follicle, without the patient experiencing much shock. Such a severe hemorrhage is rare.

The acute stage of nonspecific granuloma of the intestine, represented familiarly by the entity known as regional ileitis, occurs infrequently and is usually not recognized when seen. In the more advanced state, however, this disease may present a syndrome which almost exactly paral-

els that of abscess of the appendix, and the patient is often operated upon for this condition. The differential diagnosis is here of vital importance since the usual treatment for regional ileitis is resection of the involved portion of the bowel, a procedure requiring suitable preoperative preparation.

The case reported below illustrates how what appeared to be an idiopathic granuloma simulated acute appendicitis:

Case 4. D. C., a man aged 42, was admitted to the hospital on June 5, 1939, complaining of acute abdominal pain of twenty-four hours' duration localized in the right lower quadrant of the abdomen, in which region there was great tenderness. He had experienced no nausea or vomiting. There had been several previous attacks of a similar nature.

On admission, the patient's temperature was 103.4 F. The pulse rate was 96 and the respiratory rate 22. The blood pressure was 150 systolic and 90 diastolic. Examination revealed a large draining carbuncle on the neck, great tenderness and spasm in the region of McBurney's point, and rebound tenderness to this area. The white cell count was 28,000 with polymorphonuclears 92 per cent. A diagnosis of acute appendicitis was made, and the patient was operated upon.

The appendix was acutely inflamed. On the wall of the cecum about 2 inches distal to the appendix there was an area of leathery induration the size of a silver dollar. The terminal portion of the ileum was normal. The appendix was removed.

The pathologic report included a diagnosis of acute ulcerative appendicitis.

Following the operation the patient had several bloody stools, but all of the abdominal discomfort cleared up after a few days. He has not been seen since.

In this case there appeared to be an acute manifestation of a nonspecific intestinal granuloma because, although highly inflamed, the appendix presented the picture of involvement secondary to another process. This process may have gone on to formation of a granuloma, although this type of tumor occurs rarely in the cecum itself. Since the case could not be followed, its ultimate termination is of course unknown.

In another case there appeared to be an abscess of the appendix, but the possibility of regional ileitis was kept in mind. At the operation, the involved area of the ileum and cecum was freed and brought out through the incision in the first stage of a Mikulicz procedure, the operation being subsequently completed in the usual manner.

Infection by intestinal parasites, notably hookworm infestations, may present the picture of a mild appendicitis or recurring attacks of pain in the lower part of the abdomen, which strongly suggest recurrent involvement of the appendix. In these cases the patient may be operated upon for chronic appendicitis.

Invasion of the appendix by *Endamoeba histolytica* may produce a syndrome resembling acute appendicitis, but is more likely to simulate a chronic form of appendical involvement. Operation in these cases may be attended with disastrous consequences, and for this reason, as well as to rule out other parasites, careful examination of the stool should be made in all cases which are not typical of acute appendicitis. Craig stated: "A majority of the deaths occurring during the Chicago epidemic of amebiasis were in patients operated upon for supposed appendicitis."

SUMMARY

1. Acute and chronic mesenteric lymphadenitis may present a clinical picture closely resembling appendicitis. Since the appendix seems to be diseased, if not actually the causative factor in a large number of the cases of this disease, operation should be performed in the absence of contraindications.

2. Hemorrhage from the graafian follicle and from rupture of the corpus luteum often produces the syndrome of pain in the right side of the abdomen, nausea, vomiting, tenderness, rigidity and leukocytosis, simulating appendicitis. Differential diagnosis is here very important, because in only a few of these cases is an operation demanded. Careful analysis of time factors with relation to menstruation aids in making the diagnosis.

3. The acute stage of nonspecific intestinal granuloma may be clinically indistinguishable from appendicitis.

4. Intestinal parasites, especially *E. histolytica*, should always be considered in the diagnosis of questionable involvement of the appendix.

REFERENCE

1. Arnold, L.: Bacterial Flora Within Stomach and Small Intestine; Effect of Experimental Alterations of Acid-Base Balance and of Age of Subject, *Am. J. M. Sc.* 186:471-480 (Oct.) 1933.

2033 Riverside Ave.

DISCUSSION

DR. EDWARD JELKS, Jacksonville: Obviously fifteen minutes is too little time for an essayist to cover the subject which Dr. Slaughter has discussed. He suggested that I add another frequently occurring syndrome which is often thought to be appendicitis. So, I should like to consider the question of diverticulitis as it confuses the surgeon and diagnostician when appendicitis is the probable cause of a patient's trouble.

Most of the patients that he mentioned were young people. Diverticulitis occurs usually in older persons.

There are two important reasons for recognizing diverticulitis in acute abdominal pathologic conditions.

The first is that most of the patients with this disease should not be operated upon at all. The second is that when the surgeon opens the abdomen, he often finds a condition which he may be tempted to attack surgically. Frequently this surgical intervention does more harm than good. Dr. Slaughter and I have been mistaken several times in the preoperative diagnosis and have found at operation an abscess secondary to diverticulitis. Some abscesses should be drained, and some certainly should not be touched. The chief objection to drainage is the danger of a sinus developing that may persist a long while or remain open permanently.

It is understandable that some of the inflammatory conditions of the sigmoid and left portion of the colon are sufficiently confusing to lead the surgeon to perform an operation. One reason for the mistake in diagnosis is that an inadequate history has been obtained. If the condition is diverticulitis of the sigmoid, usually some abdominal distress is present several hours before a physician is called. There may be definite localized pain and tenderness in the right lower quadrant of the abdomen owing to the distention of the cecum, which is secondary to the pathologic process in the left portion of the colon. Of course fever and leukocytosis in a situation of this sort make a clinical picture very much like that of appendicitis.

I should like to report three cases of diverticulitis, demonstrated by slides, which so puzzled us that we made incorrect preoperative diagnoses. In all three we thought before we saw the actual condition that the patients had appendicitis.

The first patient was a man 21 years old, who had been sick for forty-eight hours. When he came to the hospital, there was a good deal of general abdominal distention, so much so that it was impossible to localize definitely the tenderness. The process, however, seemed sufficiently definite for us to make a McBurney's incision. Through this we found a normal appendix. A right rectus incision revealed a section of the small bowel caught in a loop made by a Meckel's diverticulum, the tip of which was attached to the base.

The second patient was a man of 56 years, who said that while sitting on his front porch the night before he had been attacked suddenly with epigastric pain and vomiting. When he awakened the next morning, the pain was definitely localized in the right lower quadrant of the abdomen. The white blood count was 10,000. There was definite tenderness over the right lower quadrant. The temperature was 99 F. plus. Appendicitis appeared to be his trouble, but at operation the appendix was normal. Two diverticula, one of the cecum and one of the ascending colon, were found. Both were greatly inflamed.

The third patient was a woman of 58, who had had pain in the right side of the abdomen for five or six days. The leukocyte count was increased. The pain was localized over the right lower quadrant of the abdomen and there was also tenderness in that area. At operation one inflamed diverticulum budding from the cecum near the base of the appendix was present. The appendix appeared normal.

Dr. Slaughter has mentioned the fact that sometimes in ileitis it is difficult to be sure whether or not the patient has appendicitis. A man in his late thirties came to us last year with the complaint of pain in the right side of the abdomen and some epigastric discomfort. Six months and also six weeks previously he had had rather severe attacks resembling appendicitis. When he came to the hospital he had a mass in the right lower quadrant of the abdomen, which was moderately tender. The leukocyte count was 11,000, and the temperature 100 F. Although an abscess of the appendix seemed the most probable explanation of his trouble, a barium enema was given and a roentgen study made, which revealed an unusual defect in the cecum. The roentgenograms presented a picture not characteristic of malignant neoplasm. It was so atypical that some irregularity caused by an infectious process seemed most likely. We

operated with the idea of draining an appendical abscess and found within the abdomen about 12 inches of the ileum, which was greatly thickened and lying laterally against the cecum. This portion of the ileum was encroaching upon the lumen of the cecum in the manner shown by the roentgenograms.

There are a great number of conditions in the abdomen which simulate appendicitis. I am sure that most practitioners see them and are confused as to what they are and what should be done about them. In spite of all that has been studied, said and written about appendicitis, it still is a subject with surprises and enduring interest.

DR. I. M. HAY, Melbourne: In the appraisal of a patient with a condition resembling appendicitis one should be guided by the important factors of age and sex in the amount of study given to diagnosis, especially in those cases presenting a palpable tumor.

In children, masses are much more frequently encountered, and a diagnosis should be well established. Many unnecessary operations are performed for non-specific mesenteric lymphadenitis. Also, the speed of the formation of an abscess is more rapid, so that retroperitoneal drainage may be done. In the absence of a palpable mass, operation should certainly not be delayed as the infection proceeds more rapidly in children.

During middle age, the diagnosis in men is more simple, and masses are more rarely encountered. But in women exhaustive differentiation should be made. Again in the aged, masses are more often encountered. Here delay is more dangerous, and one should explore on less positive diagnostic findings. The aged person cannot stand long periods in bed. In this regard the wound should be sutured strongly enough to allow early mobility. In these cases the use of buried steel wire should be considered.

I wish to congratulate Dr. Slaughter on this timely paper.

DR. J. SAM TURBERVILLE, Century: I hesitate to say anything, but I have seen three times in my life suppurative mesenteric lymphadenitis. Usually cases in which this condition occurs are incorrectly diagnosed. I have seen three acute cases; in all the mass was slightly to the left of the midline at about the level of the navel. I saw one subacute case, and this time the mass was to the right of the midline and above the navel. In the acute cases when the patients were operated upon, a left trans-rectus incision was made. At operation in the subacute case, a right rectus incision was made.

I should also like to direct attention to pain from hemorrhage of the ovary. A curious finding is that bleeding from the left ovary often causes pain in the right side. I have no idea why this is true. I think cases of this kind should be observed closely to see if an explanation can be found. Another disease that causes confusion in acute abdominal conditions is infection by intestinal parasites. I have seen many pinworms in an appendix, and occasionally a hookworm.

I once confused invasion by roundworms with appendicitis, and once with obstruction of the bowel. When the state of the appendix does not justify the diagnosis, occasionally it is found that pinworms or hookworms are causing the symptoms.

DR. T. H. LIPSCOMB, Jacksonville: Most of the conditions simulating appendicitis have some atypical symptoms. I am speaking from the standpoint of the roentgenologist for I believe he can be helpful to the surgeon in a number of confusing cases of this sort.

I think that instead of referring the patient for study following a barium enema, the surgeon ought to say to the roentgenologist, "I have a patient who has symptoms something like those of appendicitis in the right lower quadrant of the abdomen, but I am not sure what the trouble is and I should like for you to examine him." The roentgen examination can be helpful in regional ileitis, in diverticulitis and in pain of ovarian origin, but it should not be limited simply to that contingent on a barium enema. I feel that the roentgenologist has not rendered the patient and the surgeon the best aid unless

the examination includes the more complete study that follows administration of barium both orally and by enema.

In the slides Dr. Jelks showed the regional ileitis might have been detected if the barium had been given by mouth and the patient had been examined when the barium was distributed partly in the small bowel and partly in the large. The appendix, if it is perfectly normal, fills with barium from one route or the other and can be moved about freely depending upon its length. Regional ileitis frequently occurs in the terminal portion of the ileum and may be as close as 1 or 1½ inches from the appendix. One can press over the terminal section of the ileum and elicit reflex rigidity, pain and tenderness, and the appendix can be moved about freely without pain. Definite differentiation between these two conditions is thus possible.

The presence of diverticulitis also can be demonstrated to better advantage by the oral administration of barium rather than by a barium enema. If the enema alone is given, it certainly should be of the double contrast type. In some instances stereoscopic roentgenograms should be made.

In most cases of ovarian or tubal irritation the pain and tenderness are medial to the cecum and appendix.

I would urge that in these cases the roentgenologist be given a chance to help.

DR. ALLEN P. GURGANIOUS, Palatka: Two cases have come under my observation within the last year that were somewhat unusual in my experience. One case of an acute surgical condition of the abdomen I felt sure was a case of acute appendicitis in a man 32 years old. He had been out working and had bruised himself internally. About 4 a. m. he came to the hospital with acute symptoms. The white cell count was about 20,000, as I recall. Operation revealed a carcinoma of the cecum. The bruising had apparently caused inflammation, and the disease had in consequence flared up. A biopsy proved the diagnosis.

In the other case the patient, a girl aged 16, had acute cecitis. I should like for Dr. Slaughter to mention this condition when he concludes the discussion. The appendix in this case was normal, but the area all around the cecum was acutely inflamed, and the whole peritoneum was acutely injected. Somewhat unusual was a large mass of fecal matter in the cecum which could be lifted out during manipulation to find the appendix.

Two cases, of course, do not justify drawing conclusions. The patient with the carcinoma of the cecum is still living despite extensive development of the disease. In the other case, the girl of 16 made an uneventful recovery.

DR. HERBERT E. WHITE, St. Augustine: I was much interested in the discussion of regional ileitis. I want to mention one diagnostic point, namely, that in the presence of appendicitis there is muscular rigidity. In regional ileitis muscular rigidity is not present.

DR. SLAUGHTER (concluding): Before answering the questions I should like to express my appreciation to Dr. Hay and to Dr. Jelks. I am glad that this paper has provoked discussion because this question I think surely has a great many possibilities.

Dr. Jelks and I agreed that if I did not discuss diverticulitis, he would. It is not unusual for diverticulitis to cause symptoms of appendicitis with pain in the right lower quadrant of the abdomen. Drainage of the diverticula often causes fistulas to develop, not one of which has been closed without a great deal of trouble in the cases I have observed. Most of them are still draining. Of course, as Dr. Jelks brought out, it is better not to operate in these cases. There may be a fistulous tract which it is impossible to close. Because of the location, surgical access to the diverticulum is difficult in most instances. Everything gets cemented down in one place and makes closure well nigh impossible.

The question of ileitis is not one that should be brought up here except to mention that if a reasonably satisfactory diagnosis of this disease is made in time,

trouble may thereby be avoided by not removing the appendix. It is not always possible, however, to tell. We operated on one patient, a man with granuloma of the cecum, and did not get into trouble. In a large number of the cases of regional ileitis fistulas develop after appendectomy.

Dr. Turberville's remarks on mesenteric lymphadenitis are particularly interesting. He presented a question that I did not have time to go into. One or two writers have tried to evaluate the relationship of general infections, such as pharyngeal infections in children, to these mesenteric enlargements. In perhaps 40 per cent of the cases there is a pharyngeal infection. Thus the question arises as to how dangerous it is to remove the nodes for a specimen. We removed one in one case, but since studying the subject I feel certain that we will not remove others. There have been cases of severe infection following the removal of the node. Cultures in some instances showed infection by streptococci.

I do not share Dr. Lipscomb's enthusiasm for roentgen studies, that is, in the diagnosis of regional ileitis. But one cannot argue with the roentgenologists. They come back with uncontradictable evidence. This examination may be helpful at the time, but the surgeon spends the first week after operation getting the barium out of the patient. The roentgenologist, of course, is spared that particular difficulty. Undoubtedly it is of great value, and I do not underestimate it.

As to hemorrhage in the pelvis with the presence of pain in the shoulder, hemorrhage in the peritoneal cavity frequently is associated with pain in the left shoulder. I do not know why it is more noticeable in the left shoulder. This question of bleeding in the pelvis causing pain in the shoulder could be studied for a long time. Evidently there is a reason, but I am not a competent authority for I hear complaint of so much pain in the right side of the abdomen that I cannot explain. It may be caused by something in the nervous system, but there one might get into trouble with the neurologists.

Dr. Gurganiou's question of cecitis was interesting indeed. I feel that his case was not one of granuloma such as I described.

RICKETTSIAL DISEASES IN THE SOUTH

JACK O. W. RASH, M.D.

MIAMI

The rickettsial diseases, or that group which includes endemic typhus fever and Rocky Mountain spotted fever, are of great interest to clinicians in the South because of their increasing incidence in this section and the diagnostic difficulties which they sometimes present. They are practically worldwide in distribution. Some have been known to man for many centuries. It has been stated that wherever man, animals and their ectoparasites exist, this group of diseases is found.

There is no general agreement regarding the exact status of the rickettsias in biology, but, according to Pinkerton,¹ "they are morphologically small, pleomorphic, and bacterium-like, occupying an intermediate position between the typical bacteria and the heterogeneous group of so-called filterable viruses. They differ from bac-

teria in that they can grow only within living cells, and in this respect they resemble the filterable viruses. They resemble typical bacteria in that they are too large to pass through filters of certain size through which filterable viruses can pass." The bacterium that most closely resembles the rickettsias in vectorial distribution is *Bacterium tularense*, yet it does not produce a distinct, self-limited disease in experimental animals as the rickettsias do. Wolbach² defined the rickettsial diseases as "a group of self-limited, specific, non-infectious diseases, transmitted by arthropods and characterized by continued fever and a rash. The pathology is chiefly in the blood vessels and the lesions there are occasioned by the actual presence of the micro-organisms and not by diffusible toxins."

Since the purpose of this paper is to discuss these diseases as they occur in the South, only when it is necessary to present interesting data in the evolution of knowledge of the rickettsial diseases will a passing reference be made to the group occurring in other sections.

Two rickettsial diseases in the South have been well described. The first, endemic or murine typhus fever, immunologically similar to louse-borne epidemic typhus of the Old World with certain minor variations, but epidemiologically different, has been well known for several years. Endemic typhus apparently has a similar relation to Brill's disease, a sporadic type of typhus that occurred along the Eastern seaboard and which has all but disappeared in the last decade. Secondly, Rocky Mountain spotted fever, according to recent evidence, bears a close similarity to the disease that is known in the Mountain area of this country by the same name, but has rather wide variation in virulence according to local geographic distribution. The disease is immunologically similar to the Sao Paulo typhus of South America and the *fièvre boutonneuse* of the Mediterranean area.

A third disease, defined as clinically and immunologically similar to an entity recently described in Australia as Australian Q fever, has been reported³ in a laboratory worker. This disease has only tentatively been accepted as a rickettsial disease, as there are variations in its bacteriology from the criteria heretofore set up for the rickettsial group. The disease has not been reported in the South, but because of the possibility of its existence here, it is reviewed in brief.

¹Formerly Assistant in Medicine at The Tulane University of Louisiana School of Medicine, New Orleans.

HISTORICAL REVIEW

Outbreaks of epidemic typhus up and down the Eastern seacoast have been known for over a century. These epidemics were apparently not confined to the coastal areas, for Gerhard⁴ stated that during the outbreak in Philadelphia in 1812-1813 the disease "overran a considerable portion of the Middle States, causing extensive ravages in town and country." He wrote that the epidemics began in March and continued until August. This contrast to the seasonal occurrence of Old World typhus in the winter, suggests the disease at that date may have been in a transitional stage, exhibiting the epidemic occurrence of Old World typhus, but presenting the seasonal prevalence as well as the urban and rural distribution of endemic typhus. He noted the chief occurrence of the disease in the poor and overcrowded, the high incidence in the negro, and a mortality rate of about 20 per cent for white persons as compared with 40 per cent for negroes. This author was the first to distinguish clearly between typhus and typhoid.

Rocky Mountain spotted fever was reported along the Snake River Valley first in 1873, although it was probably known in the West many years before. Smith and Kilborne⁵ reported the transmission of Texas cattle fever by ticks in 1893. Theirs was the first account of tick-borne disease.

Maxey,⁶ in 1899, was the first to describe Rocky Mountain spotted fever. He noted the seasonal appearance of the disease and its predilection for persons in outdoor life who frequented the mountains and adjacent areas. His description is generally accurate: "Spotted fever may be defined as an acute, endemic, non-contagious, but probably infectious febrile disease, characterized by a continuous, moderately high fever, some arthritic and muscular pains, and a profuse petechial and purpurial eruption in the skin, appearing first on the ankles, wrists, and forehead, but rapidly spreading to all parts of the body." In 1902, the disease was reported in the Bitterroot Valley of Montana. McCalla⁷ in 1905 produced Rocky Mountain spotted fever in two volunteers by the bite of an infected tick removed from a patient. Howard Taylor Ricketts⁸ achieved the first experimental transmission of a rickettsial disease to laboratory animals with the rickettsia of Rocky Mountain spotted fever in 1906. That same year he⁹ proved that the

wood tick, *Dermacentor andersoni*, transmitted the disease, and demonstrated infected ticks in nature. The hereditary passage of the virus from one generation of ticks to the next via the egg was also demonstrated by Ricketts¹⁰ in 1906. King¹¹ in 1906 produced the disease independently in guinea pigs via the bite of an infected tick.

Ricketts¹² in 1911 described the micro-organism of Rocky Mountain spotted fever in man, guinea pigs, monkeys and ticks. A year later Ricketts and Wilder^{13,14} demonstrated transmission of Mexican typhus by the louse, described the microorganism of the disease in man and the intestinal contents of infected lice, and, by cross immunity tests, demonstrated that typhus and Rocky Mountain spotted fevers are two distinct clinical entities. Howard Taylor Ricketts died in Mexico in 1910 from typhus, while studying the disease. De Rocha Lima proposed a fitting tribute to this martyr of medical science by creating the Genus *Rickettsia* in 1916.

Brill¹⁵ in New York City in 1910 reported a group of cases of "an acute disease of unknown origin" that resembled epidemic typhus fever in clinical appearance, but differed from it in its seasonal incidence, in its occurrence usually in only one member of a household group and in the absence of lice in association with the cases. No fatalities were noted in over 200 cases. In 1911 Brill¹⁶ reported the findings at autopsy of one case and the negative results after injection of infectious material into monkeys, in contrast to the reports two years previously of transmission to monkeys of the virus of epidemic typhus in Europe¹⁷. He stated at that time that his group of cases probably represented an altered strain of epidemic typhus. In the same year Maver^{18,19} reported the experimental transmission from infected to noninfected guinea pigs of Rocky Mountain spotted fever by the dog tick, *Dermacentor variabilis*, and by *Dermacentor marginatus* and *Amblyomma americanum*. Anderson and Goldberger²⁰ in 1912 claimed that Brill's cases were identical immunologically with Old World typhus.

As to the length of time endemic typhus fever has been present in the South, only a conjecture may be proposed. There is a possible historic relationship between endemic and epidemic typhus. Endemic typhus is probably the older type of the disease. This hypothesis is strongly suggested by the nonsurvival of the in-

fects louse in epidemic typhus, indicating the relatively recent status of this arthropod as a vector, while the rat flea, the chief vector of endemic typhus, survives infection, suggesting its status as an older vector in a more ancient disease. Assuming the endemic type to be the older, it can be thus postulated that the louse originally acquired infection from man, and louse-man-louse passage altered the virus to the epidemic form. Contrariwise, the epidemic disease may represent priority. It presumably may have been transmitted to rats by infected rat fleas that acquired infection from man, and a reservoir was thus established in rats. Repeated rat-flea-rat passage may have altered the virus to the endemic type seen in the rodent reservoirs today.

Gerhard⁴ a century ago noted the presence of epidemic typhus in rural sections as well as in cities during epidemics at that date. His observations suggest an early introduction of the virus of typhus by rats and other rodents into rural and urban sections away from the seacoast. Whatever the mode of introduction in the South, there has been a spread of the disease from the coastal areas toward the interior in the last ten years or more, due perhaps in part to the migration of rodents and the increased planting of foodstuffs in this section²¹. At present the disease is both urban and rural in distribution. In some parts of Georgia and Alabama, the rural prevalence is reported to be higher than that of urban centers.

Paullin²² first described endemic typhus in the South in Atlanta in 1913 and reported 7 cases; his clinical description of the disease was accurate and interesting. Newell and Allen²³ described cases in North Carolina in 1914. McNeil²⁴ reported its presence in Texas in 1916. Maxcy and Havens²⁵ made the first extensive survey of endemic typhus in the South in 1923 in Alabama, and chiefly through their efforts attention was called to the not uncommon occurrence of the disease in this area. Maxcy²⁶ concluded in 1926 from his study of endemic typhus that the "epidemiological characteristics afford no evidence of louse transmission." He noted that many of his cases were in persons associated with places that were inhabited by rodents and suggested that fleas, mites and possibly ticks might carry the disease to man and that rodents acted as reservoirs. This suggestion proved to be correct regarding fleas and mites as vectors and

rodents as reservoirs. The ticks he incriminated were possibly observed in cases of Rocky Mountain spotted fever that were confused with endemic typhus at that time. Maxcy,²⁶ in 1929, noted the disease was most often seen in seaport towns and seldom in the interior or rural districts. The prevalence of the disease in certain interior areas may, however, have been higher at that time than was suspected. Baker, McAlpine and Gill²⁷ noted that most of the endemic typhus in Alabama was in rural sections in 1935. The rat flea was demonstrated to be a vector of endemic typhus by Dyer and his associates²⁸ in 1931, as suggested by Maxcy²⁶ five years earlier.

In 1931, in a study made in several of the Southern states, Rumreich, Dyer and Badger²⁹ differentiated clinically and epidemiologically an Eastern strain of Rocky Mountain spotted fever and endemic typhus. Cases of Rocky Mountain spotted fever were noted in Virginia, North Carolina, Maryland and states adjacent to the North; those of epidemic typhus were located in Georgia, Maryland and Florida. Following the work of Maver¹⁹ in 1911 with a strain of Rocky Mountain spotted fever from the West, Dyer, Badger, Rumreich³⁰ first described an Eastern strain of virus found in the southern part of the United States, borne by the American dog tick, *D. andersoni*. The virus of the Eastern strain was first identified in the South by this same group³¹ and was established in guinea pigs, monkeys and rabbits, initially in 1931. Until this date reports of cases of the disease under the name of Rocky Mountain spotted fever had not appeared in the Southern literature, although it is likely that some cases had previously been described as typhus.

Boyd³² in 1932 described a case occurring in Alabama in 1931 that clinically resembled Rocky Mountain spotted fever, but its identity as such was not proved. Kemp and Grigsby³³ reported a case proved by cross immunity tests in Texas in 1931. Crutcher³⁴ reported in 1933 the first case from Tennessee; it occurred in June 1931. Litterer³⁵ in 1933 reported 6 cases from Tennessee and 4 were proved by animal inoculation; in all 6 cases there was no evidence of cross immunity with endemic typhus. Two cases were reported by Milam³⁶ in North Carolina in 1934. He stated that 37 cases had been reported from that state in 1933 and that several local physicians

had reported cases of the disease to their colleagues several years before 1932, the year the disease was made reportable. Five physicians stated emphatically to him that they had seen cases of the disease as far back as twenty years previously. Snider, Dare and Caudill³⁷ reported a case in Kentucky in 1939 and noted that the disease had first been reported there in 1934. Nine cases have been reported there since that date. A review of the cases occurring in Tennessee to date was written in 1939 by Lumsden and Tucker;³⁸ they stated that 57 cases had been reported since 1931. Two cases of Rocky Mountain spotted fever with one death were reported from Florida in 1934; no others have been reported. From 1928 through 1939, 716 cases of endemic typhus with an average fatality rate of 10.4 per cent were reported from Florida.³⁹

ENDEMIC TYPHUS

Endemic typhus may be defined as a self-limited infectious, noncontagious disease caused by the *Rickettsia prowazeki mooseri*, which is transmitted chiefly by the rat flea. Clinically the disease is characterized by a sudden onset and an elevated remittent type of temperature, averaging two weeks in duration. A profuse rash is usually noted on the trunk and extremities, and splenomegaly is present. Termination occurs by crisis, complications are few, and the fatality rate is low.

BACTERIOLOGY. Endemic typhus is caused by the microorganism designated as *R. prowazeki mooseri*, which is distinguished from the *Rickettsia prowazeki prowazeki*, the causative organism of louse-borne epidemic typhus. Immunologically and serologically they are similar, and they produce complete cross immunity with each other. Epidemiologically they are distinctly different and are transmitted by different arthropod vectors. Constant differences are noted in experimental inoculation of animals. Zinsser⁴⁰ made some interesting observations on Brill's disease. He noted that about 95 per cent of the cases occurred in foreign-born persons and postulated that this entity may represent a recrudescence of a former attack of epidemic typhus experienced before emigration of the patient from Europe. As to the causative rickettsia, he stated:

In our own experience with several strains of both types (epidemic and endemic) we have been able occasionally to bend the behavior of one type in the direction of the other, but as soon as experimental manipulation was relaxed the individual strains reverted to their original behavior.

The rickettsias of endemic typhus cannot be cultivated except in tissue cultures containing living cells in which they assume an intracellular, intracytoplasmic position. They stain purple with Giemsa's stain and are gram-negative. The organisms measure 0.3 micron by 1.5 microns to 2.0 microns and do not pass through the usual bacterial filters. They grow well if injected into guinea pigs, mice, or rabbits, in which they produce a characteristic tissue response. Recently Zinsser and Castaneda⁴¹ produced an increased yield of rickettsial bodies by subjecting rats to heavy irradiation by roentgen rays before inoculation. Methods of tissue culture were first devised by Nigg and Landsteiner⁴² for the rickettsia of typhus.

Zinsser, Fitzpatrick and Wei⁴³ developed an efficient agar tissue culture which has proved most successful in cultivating the rickettsias of endemic typhus. Pinkerton and Bessey⁴⁴ reported in 1939 that rats with a deficiency of riboflavin have a greatly increased susceptibility to typhus inoculation, and this method may be used to facilitate routine inoculation of animals.

PATHOGENESIS. Endemic typhus is transmitted by the bite or feces of an infected rat flea and is primarily a rat-flea-rat disease, while man and other animals are infected only incidentally. Infected fleas rarely die, an indication of ancient parasitism in these arthropods. The common vector^{45, 46} is the tropical rat flea *Xenopsylla cheopis*, which acts as the chief vector from rat to rat, rat to man and rat to other animals. The rat flea of the temperate zone, *Ceratophyllus fasciatus*, also acts as a vector. *Pulex irritans*, the human flea, can be experimentally infected, but as yet has not been found infected in nature. Fleas hatch in two or three days from eggs dropped on the ground and floors. They pass through three larval stages and enter a pupal stage. Later the adult emerges from the cocoon and survives a year or more. It is only in the adult stage that the flea takes a blood meal from man.

The tropical rat mite, *Liponyssus bacoti*, may transmit the disease from rat to rat or from rat to man. The rat mite drops off its host after each blood meal. Each larva requires at least four blood meals during transition from larval to adult stage.

The rat louse, *Polyplax spinulosa*, is a natural transmitter of endemic typhus. It lays its eggs

in opercula on the hair of an infested animal. The eggs hatch later, and a nymphal stage emerges which closely resembles the adult. The louse is transferred from host to host by casual bodily contact. The body louse, *Pediculus humanus*, apparently can transfer the virus of endemic typhus from man to man.¹⁰

The virus of endemic typhus is present in the urine of infected rats and theoretically may be transmitted to man via contaminated food. Rats can possibly acquire the disease by consuming infected ectoparasites which do not feed upon rats in nature.

The brown rat was apparently the original reservoir of the disease, but there has been a spread to other rodents. A field mouse native to Alabama was captured by Brigham¹⁷ in 1937 and found to be infected. Other species of mice have been observed to be infected, including the cotton mouse and golden mouse. Brigham and Dyer¹⁸ listed the following additional animals as capable of being infected with the virus of endemic typhus: guinea pig, monkey, rabbit, opossum, flying squirrel, cat, dog, gopher, wood duck and squirrel. The susceptibility to laboratory infection of rodents normally found in areas of endemic typhus suggests only the possibility that they are reservoirs in nature. The virus can be maintained indefinitely in native field mice which are prevalent in the area of Alabama in which typhus is endemic. It was transferred through 16 passage generations of the cotton mouse. In the old field mouse it was carried through 36 passage generations. The virus survived 114 days in the cotton mouse, 141 days in the old field mouse and 76 days in the golden mouse.⁴⁹

DISTRIBUTION. Endemic typhus fever is widely distributed throughout the Southern states in the coastal areas and in the interior adjacent to and extending some distance from the coast. Many cases have been reported from both rural and urban districts in these areas. In Alabama it has been estimated that 30 per cent of the cases now are rural, while in one county of Georgia, 84 per cent occurred in the country.²¹ There seems to be a general tendency for the disease to spread from the coastal areas to the interior and from urban to rural areas.

Statistics on the incidence of typhus in the Southern states from 1928 through 1938 are shown in table 1. The last six-year period of the table, as compared with the first five-year period, reveals a remarkable increase in cases reported. This probably signifies an actual as well as a statistical increase. Because of the lack of appreciation of the prevalence of the disease in the past, many cases were not recognized or reported, and statistics are far from being accurate. For example, in the state of Mississippi during the first five-year period, 1928 through 1932, no cases of endemic typhus were reported, while 505 cases were reported from Alabama, many in counties adjacent to the Mississippi state line! This discrepancy gives some idea as to the inaccuracy of statistics during that period. During the six-year period, 1933 through 1938, 51 cases were reported in Mississippi. At present the interest in the disease apparently is increasing, and statistics are showing improvement. It may be fairly stated, however, that knowledge of the incidence of the mild cases of typhus in this section is inaccurate for many of these cases are unsuspected clinically. In this area few cases of

TABLE I
INCIDENCE OF TYPHUS FEVER IN UNITED STATES
(United States Public Health Service, 1928-1938)

Southern States	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938*	1939
Maryland	5	6	38	6	23	4	15	15	1	11	10	
Virginia	13	17	46	4	22	14	5	10	6	5	5	
North Carolina	0	3	16	6	24	46	23	51	33	70	82	
South Carolina	1	5	22	13	24	54	38	57	57	101	140	
Georgia	48	57	238	127	308	625	414	485	815	1046	908	
Florida	49	58	39	28	42	54	35	27	55	121	116	153†
Kentucky	0	0	0	0	0	1	0	0	0	1	0	
Tennessee	2	2	0	1	2	1	0	8	6	22	24	
Alabama	59	72	67	80	237	823	287	294	369	480	342	
Mississippi	0	0	0	0	0	1	0	5	6	15	24	
Louisiana	0	1	0	1	17	11	18	20	12	23	27	
Arkansas	0	9	0	0	0	1	0	0	0	0	0	
Texas	5	8	13	43	227	398	496	276	327	453	497	
Oklahoma	0	0	0	0	0	0	0	0	0	1	1	

*Incomplete.

†Florida State Board of Health.

endemic typhus have been differentiated from Rocky Mountain spotted fever by laboratory methods.

The greatest seasonal prevalence is in the summer and fall, with the peak occurring in July; August and September. Cases are seen the year around in endemic areas. The sex incidence of the disease is from two to four times as high in men as in women and children. The higher incidence in men is explained by their greater exposure to rodents due, in part, to occupation. The negro race apparently is not as susceptible as the white race for it contributes only from 10 to 15 per cent of the cases. This low figure may be due, however, to difficulty in recognizing the rash in the black race.

PATHOLOGY. The pathology of endemic typhus is not well known as few necropsies have been reported in the literature. The microscopic lesion is one of an arteriolitis, presenting proliferation of the endothelium and perivascular infiltration of round cells and macrophages. Rickettsial bodies are noted in the endothelium, but the media is free of involvement. Thrombosis is not uncommon in the smaller arterioles, but necrosis is absent. These vascular changes are most commonly seen in the integument and brain. The mucous and serous membranes may be included in the vascular involvement.

In turning to diseases that are closely associated with endemic typhus for reports at autopsy, 3 cases¹⁶ of Brill's disease presented the following: congestion of the cerebral vessels, brown atrophy and parenchymatous degeneration of the heart, a hemorrhagic spleen, congestion and edema of the lungs, degeneration and necrosis of the parenchyma of the liver, subpleural hemorrhage and a hyperplastic bone marrow. The brain in one case was described as negative, and no mention was made of changes in the blood vessels. Microscopically, arteriolitis and periarteriolitis of the smaller vessels of the medulla, the skin and the heart muscle were the principal findings. Acute splenitis, toxic nephrosis and cloudy swelling of all organs were noted and are of secondary importance.

CLINICAL FINDINGS. The history in endemic typhus is usually not important, but the patient may have had an intimate association with rodents or fleas. After an incubation period of from eight to fourteen days, endemic typhus usually presents a sudden onset. A few patients,

however, may become indisposed gradually. Several hours after the onset, the patient may appear toxic, with flushed face, dry skin and other signs of increased temperature response. A chill or chilliness often accompanies the onset, or occurs in the first day of the disease. The temperature usually rises to from 101 to 103 F. the first day, or may ascend to this height gradually during the first few days. The elevation of temperature remains, with daily remissions, for two weeks and terminates by crisis on from the fourteenth to the sixteenth day. In abortive cases, the temperature may remain high for several days only and return to normal by the end of the first week. Only a slight rise in temperature with a duration of less than two weeks may occur in avirulent cases. The virulence of the organism can usually be measured by the temperature response of the patient, provided that peripheral vascular collapse has not entered the picture.

Headache, owing to toxicity and lesions in the brain and meninges, may be a constant symptom most distressing to the patient and may persist for the duration of the disease. A macular rash, most often appearing on from the fourth to the sixth day,²⁰ is a reflection of the vascular lesions in the integument. The rash may occur as early as the second day, or as late as the eleventh day,⁵⁰ and consists of dull red maculas from 3 to 6 mm. in diameter with rather poorly defined margins that fade on pressure. Occasionally the rash assumes a maculopapular appearance, and, if endothelial damage is severe, petechial and purpuric areas develop. The rash usually persists for from five to ten days; yet cases in which there is an evanescent rash are reported along with those in which there is apparently no rash present. Cases characterized by a mild rash or no rash are usually of the avirulent or abortive type. The rash in the majority of cases begins on the chest or abdomen and on the medial aspect of the arms, and spreads centrifugally to involve most of the dermal surface of the trunk and extremities. The palms, soles and face usually are not involved. I have noted in southern Florida at least one case in which there was a profuse, persistent rash on the face. This case was proved to be endemic typhus by protection and cross immunity tests. The rash fades gradually and may coalesce; desquamation, if it occurs at all, is rare.

Muscular pain of a generalized nature suggests vascular lesions in the skeletal muscles, or it may indicate, along with profound asthenia, the great degree of toxicity presented in some cases. Epistaxis occurs and is caused apparently by vascular lesions in the nasal mucous membrane; conjunctivitis may indicate further involvement of the mucous membranes. Cough and expectoration mirror the pathologic changes in the smaller vessels of the respiratory tract. The vascular proliferative process sometimes involves the intestinal tract, and intestinal hemorrhage, owing perhaps to thrombosis, has been noted. Abdominal pain and constipation may indicate peritoneal involvement; vascular lesions in abdominal lymph nodes or viscera can produce identical symptoms.

On physical examination the main points of interest, besides the rash described, are as follows: The mental status of the patient may be distinctly altered, although usually to a mild degree. Apathy, irritability and insomnia are not uncommon and reflect the lesions of the central nervous system and the toxicity of the patient; delirium may develop, but is rare. The pulse usually presents a bradycardia. Splenomegaly is common in this disease and is a reflection of the diffuse acute splenitis present. The spleen is often palpable soon after the onset of the disease. Lymphadenopathy has been noted and represents hyperplasia of the peripheral lymph nodes.

From the preceding description of the clinical aspect of this disease, the common clinical variations perhaps need no further emphasis. Suffice it to say, the typical cases of typhus will not be incorrectly diagnosed by the clinician who is familiar with the disease, and should not be too often mistaken by the novice. The avirulent and atypical forms of the disease are, however, a diagnostic pitfall for the beginner and experienced alike, unless the diagnosis is kept constantly in mind in all cases of undiagnosed fever with or without rash.

COMPLICATIONS. Complications of endemic typhus are apparently infrequent, and very little seems to have been written about them. As thrombosis of the smaller vessels is common, phlebitis must occur more often than has been reported. In older persons with atherosclerotic peripheral vessels, thrombosis and infarction in the heart, brain, kidney, lungs, or spleen might easily occur. In patients with preexistent myocardial or valvular damage, congestive heart fail-

ure may develop and result in a fatal outcome. The prolonged high temperature and great toxicity with increased metabolism predispose to peripheral vascular collapse, commonly seen in other febrile states of long standing. Bronchopneumonia occurs terminally most often in the oldest age group. Thromboangiitis obliterans is considered by some²¹ to be a late sequela of typhus. The fatality rate averages approximately 5 per cent, being less than 2 per cent in the group under 45 years, from 5 to 7 per cent for ages 45 to 64, and approximately 30 per cent for the age group over 65 years.²¹

LABORATORY. The diagnosis of endemic typhus fever may be assumed on clinical grounds alone, or it may be made on clinical grounds plus a positive Weil-Felix reaction. This agglutination test, which results in a positive reaction in a number of the rickettsial diseases, does not differentiate endemic typhus from Rocky Mountain spotted fever. To make this differentiation, animal inoculation or cross immunity tests must be performed not later than the fifth day of the disease. Protection tests may be performed later during the progress of the disease or in the period of convalescence. Although differentiation can be made often on clinical grounds alone, laboratory confirmation should be obtained in the areas where the diseases coexist. The white blood cell count varies from 3,500 to 15,000, and often reveals a slight to moderate shift to the immature forms. In the cases I have observed, a leukocytosis has rarely been seen. Examination of the spinal fluid usually gives negative results, but slight increases in globulin and a shift in the midzone of the colloidal gold curve occur.

The Weil-Felix test is performed by mixing blood serum from the patient with a suspension of the strain OX₁₉ of the *Proteus* bacillus in serial dilutions. An agglutination of the organism in a titer of 1:640 or higher is considered a positive test. It has been noted that positive agglutinations up to 1:320 result from other diseases besides typhus. The agglutinins usually appear sometime during the second week, rise to their peak at the time of defervescence and diminish rapidly thereafter. Some cases fail to develop positive agglutinins in the course of the disease. A rising titer in dilutions up to 1:320 may be considered suggestive of typhus, especially if the first test showed an absence of agglutinins. Castaneda²² suggested that *Proteus* and

Rickettsia have a common antigenic factor which is probably a polysaccharide, thereby offering an explanation for the positive agglutination of the *Proteus* organism in the Rickettsial diseases.

The test by animal inoculation consists of injecting 5 cc. of the patient's blood into the peritoneal cavity of male guinea pigs, or a smaller amount into rats. In a positive test the guinea pig will exhibit a febrile response in from four to twenty days. The typical reaction in endemic typhus is swelling, edema and erythema of the scrotal sac. Transfer may be made on the third or fourth day of the rise in temperature by the injection of blood or macerated brain, spleen, or tunica vaginalis into fresh animals. Rickettsial bodies may be observed in scrotal smears, and inflammatory lesions containing rickettsias are seen in the mesothelial cells of the tunica vaginalis after appropriate staining. Lesions similar to those produced by the virus of Rocky Mountain spotted fever are found in the brain of infected animals. Lillie, Dyer and Topping⁵³ pointed out differences in the anatomic location of the lesions in the two diseases. Animal passage in guinea pigs and rats may be continued indefinitely.

Rats present a febrile response after inoculation, and rickettsial bodies are noted in the scrotal sac. Rats subjected to antecedent radiation with roentgen rays will produce large numbers of rickettsial bodies intraperitoneally after injection with infectious material. Rats with a deficiency of riboflavin have a greatly increased susceptibility to typhus.⁴⁴ These rats may be preferable for use in routine animal experimentation. In rabbits and monkeys positive Weil-Felix reactions develop after inoculation, but in guinea pigs they do not.

Cross immunity tests are of value in the final differentiation of the disease. Guinea pigs are injected with infectious material and after a suitable period are inoculated with known strains of rickettsial diseases. They show protection against the virus of the organism which was originally injected, but no protection against other rickettsias.

Protection tests are performed by mixing blood serum from the patient and known infectious material from typhus fever and Rocky Mountain spotted fever separately. After a suitable interval the mixture of serum and rickettsias is injected into guinea pigs. Controls are in-

jected with infectious material from both diseases. The animals injected with the serum containing antibodies of the rickettsia injected, are completely protected. The controls and those animals injected with the rickettsias that do not have antibodies in the serum manifest a febrile reaction or succumb. The protection test is of little value in typhus unless definite differences are noted in the clinical course of the disease in the protected animals and in the other groups.

DIFFERENTIAL DIAGNOSIS. Endemic typhus must be differentiated from Rocky Mountain spotted fever. This distinction is possible clinically in the classical cases, but difficult in the atypical cases. The rash of typhus, typically beginning on the trunk and spreading centrifugally to the extremities, is in contrast to the rash of Rocky Mountain spotted fever that most often begins on the wrists and ankles and spreads to the trunk in a centripetal fashion. It usually does not involve the palms, soles, scalp, and face, as it does commonly in Rocky Mountain spotted fever. The individual lesions of the skin are not greatly different, both being macular and maculopapular. The rash of Rocky Mountain spotted fever becomes petechial as a rule, but the petechial aspect occurs occasionally in typhus. A sudden onset is characteristic of both entities, while headache, epistaxis and conjunctivitis may be noted in either. The temperature curves are not greatly different, but the temperature of typhus falls by crisis on from the fourteenth to the sixteenth day, while the temperature in Rocky Mountain spotted fever terminates by lysis from the fifteenth to twenty-second day. Splenomegaly and bradycardia are observed in both conditions. The white blood cell count ranges from 3,500 to 15,000 in typhus and from 15,000 to 30,000 in Rocky Mountain spotted fever. The Weil-Felix reaction is positive in both diseases.

The preceding scheme for differential diagnosis cannot be applied to the mild or abortive cases that often are of short duration and present an atypical rash or none at all. These cases can only be differentiated by animal inoculation, cross immunity tests and protection tests.

Endemic typhus must be differentiated from typhoid fever. The rapid onset, profuse rash and sudden termination of the fever in two weeks by crisis distinguish typhus clinically from typhoid with its insidious onset, scanty crop of rose spots and fever of from two to five weeks'

duration with termination by lysis. In the laboratory typhus presents a positive Weil-Felix response as compared to typhoid fever in which studies may reveal cultures of the blood, stool and urine that are positive for the typhoid bacillus or there may be a positive Widal reaction.

Dengue and endemic typhus could be confused. Nevertheless, the duration of dengue is about one week, and the remission of symptoms for one or two days before the secondary rise in temperature distinguishes it from typhus. In dengue painful extremities are a major complaint. The rash in dengue usually occurs on the fifth or sixth day, is morbilliform, and usually begins on the hands and spreads to the back, chest, upper arms and thighs. A leukopenia is the rule of dengue. The Weil-Felix reaction is negative. Dengue rarely occurs sporadically and is almost always epidemic.

Meningococcic meningitis may present a rash similar to that of typhus. The stiff neck, the altered reflexes indicating involvement of the upper motor neurons, and palsy of cranial nerves suggest cerebral and meningeal involvement. A negative Weil-Felix reaction and a culture of the blood or spinal fluid or a smear that is positive for the meningococcus, with a pleocytosis in the spinal fluid and an elevated intrathecal pressure, differentiate meningococcic meningitis from typhus.

Secondary syphilis might be confused with endemic typhus. The lack of intense febrile reaction, the presence of a chancre and of condylomas or lesions of the mucous membrane, the occurrence of the typical ham-colored lesions on the face, palms and soles, along with positive dark field evidence or serologic change, and a negative Weil-Felix reaction should, however, make the differentiation between secondary syphilis and typhus not difficult.

PREVENTION AND TREATMENT. Prevention of endemic typhus could, theoretically, be effected by the eradication of rodents. This has been found to be generally impracticable in most localities. The virus of endemic typhus was not available in sufficient number for experimentation with vaccine until Zinsser and Castaneda⁴² in 1932 produced large numbers of rickettsial bodies in the peritoneal cavity of rats by subjecting them to roentgen therapy before inoculation. Since then, successful vaccination of human volunteers⁵⁴ in experimental typhus has been

carried out, and laboratory workers have been protected. In 1939, a method of agar tissue culture was devised⁴³ which produces a copious growth of rickettsial bodies that can be transplanted. Successful animal protection has been effected with vaccines derived by this method, but extensive field application has not been made. It seems that in the near future commercial vaccine may be obtained and used in sections where it appears justifiable.

Passive immunity in endemic typhus has been achieved⁵⁵ by the injection of large doses of virus in horses. The horse serum has given promising results clinically in a small number of cases. Guinea pigs with experimental typhus showed no improvement after treatment with sulfanilamide.⁵⁶

ROCKY MOUNTAIN SPOTTED FEVER

Rocky Mountain spotted fever may be defined as a self-limited, noncontagious infectious disease caused by the rickettsia *Dermacentroxenus rickettsi*, which, in the South, is transmitted chiefly by the wood tick. It is characterized by a sudden onset and a moderate to high remittent fever of two or three weeks' duration. A profuse petechial rash, beginning at the periphery of the extremities, eventually involves the trunk, face and remainder of the limbs. The disease terminates by crisis or lysis; complications are frequent, and fatalities are not uncommon.

BACTERIOLOGY. The rickettsia, *Dermacentroxenus rickettsi*, was divided into two general types according to geographic distribution. The organism occurring in the Mountain states was known as the Western type while that occurring in the Eastern and Southeastern part of the United States was known as the Eastern type. Originally this arbitrary division conveyed a difference in severity in the two types of the disease as the Western type was thought to be more virulent, with a higher mortality in both man and experimental animals, than the Eastern type. At present, it is known that this division into types has little significance for strains of widely varying virulence may be found in both the Eastern^{57, 58, 59} and the Western sections of the country.

The organism presents practically identical morphologic and staining characteristics with those of *Rickettsia prowazeki* of typhus fever. Methods of animal inoculation produce a rather characteristic response in the guinea pig, rabbit

and monkey. The rickettsia, *Dermacentroxenus rickettsi*, can be cultivated only in the presence of living cells, in which it assumes an intranuclear position in contrast to the *R. prowazeki*, which occurs intracytoplasmically. Methods of tissue culture similar to those described for the *R. prowazeki* of endemic typhus may be used for the cultivation of this rickettsia. Cox⁶⁰ recently developed an efficient technic for the cultivation of the rickettsia, *Dermacentroxenus rickettsi*, on egg yolk. Animal inoculation is commonly used for perpetuation of the micro-organism, as in endemic typhus.

PATHOGENESIS. In the South the rickettsia of Rocky Mountain fever is transmitted to man and animals by the common dog tick, *D. variabilis*.⁶¹ This tick, in its development, passes through three stages. The larval stage⁴⁰ develops from the egg and attaches to a host, usually a rodent. The mouse often acts as the host. A blood meal is taken, and the larva drops to the ground and develops into the adult stage. The adult tick then climbs upon foliage and waits for a potential host to which it may attach. Dogs, cattle, deer, smaller wild animals and man are commonly chosen as hosts, and a blood meal is partaken of by the adult tick. Thus the dog tick not only becomes infected in any of its three stages by taking a blood meal from an infected animal, but it also acquires the microorganism of the disease by hereditary passage via the egg from the female adult and from infected spermatozoa of the male adult tick. The life cycle of the dog tick is approximately one year. Data concerning the seasonal appearance of the immature forms of the dog tick are incomplete, but the nymphs apparently engorge over a period of several months. The adult, however, appears late in the spring and remains active until late in the fall. The viru-

lence of the virus is practically nil in hibernating ticks, but if the blood meal is taken, the virus is reactivated and the virulence is increased to a pathogenic degree in a period varying from eight hours to three days. The length of the period of reactivation is shorter in warm weather than in cold. The tick carrier rate and density of human population are two important factors in determining the prevalence of infection. The tick carrier rate may be as high as 5 per cent in endemic areas, while the higher density of population in the South and East, as compared with the West, contributes to an increase in the prevalence of the disease in these sections.

The rabbit tick, *Haemaphysalis leporis palustris*, transmits an attenuated form of *Dermacentroxenus rickettsi* in nature from rodent to rodent and apparently does not bite man. It is widely distributed over the South as well as the entire country. There is a broad seasonal occurrence of the rabbit tick; it completes a life cycle in one year. The larval, nymphal and adult stages are limited to rabbits and certain ground-frequenting game birds. Thus the virus may possibly be disseminated over wide areas by infected fowls.

In addition, there are several species of ticks in the South that have to be considered⁶² as potential carriers: *Rhipicephalus sanguineus*, the brown dog tick, is widely distributed throughout this section; *A. americanum* is found in certain sections of the South; *Amblyomma cajennense* is found in southern Florida. In the West, *D. andersoni*, the Rocky Mountain wood tick, is the chief transmitter of the disease.

The incidence of Rocky Mountain spotted fever in the Southern states during the period of 1928-1938 is shown in table 2. The seasonal occurrence begins in April, rises to a peak in June, July and August, and declines until November when a base line is reached. Occasional

TABLE II
INCIDENCE OF ROCKY MOUNTAIN SPOTTED FEVER IN UNITED STATES
(United States Public Health Service, 1928-1938)

Southern States	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937*	1938*
Maryland	38	49	55	33	33	32	33	42
Virginia	22	29	23	47	44	50	54	68
North Carolina	8	7	27	34	21	32	27	42
South Carolina	5	6	..	..	2	....	1	3
Georgia	3	1	....	1	....	....
Florida	2	....	....	....	....
Kentucky	2	....	3	1	....
Tennessee	1	4	1	2	3	1	4	8
Alabama	1	3	1	....	2
Mississippi
Louisiana

*Incomplete.

cases may be seen during the winter season in the far South. In the past, men were more often infected than women or children because of their greater frequency of exposure to the ticks due to occupation and activity in sports. With the growing participation of women and children in camping, hunting and fishing, an increasing number of cases occurs in these groups. At present, the sex incidence is equal. Recently, the largest number of cases was reported in the five to nine year age group.

PATHOLOGY. The pathology⁶³ of Rocky Mountain spotted fever, for the most part, involves the smaller blood vessels of the integument and the central nervous system. The microscopic lesion is one of a panangiitis, presenting proliferation of the endothelial, medial and adventitial layers of the arterioles, and perivascular infiltration. Rickettsial bodies are found in the endothelial and medial layers. Thrombosis of the smaller vessels occurs commonly, while necrosis, hemorrhage and sloughing have been known to occur. The mucous membrane of the soft palate may be involved in a necrotic process. The brain often contains focal areas of endothelial proliferation, thrombosis and perivascular infiltration. Neuroglial proliferation may overshadow the vascular origin of these lesions. The cerebral cortex, pons, cerebellum, basal ganglia and medulla are the most frequent sites of focal involvement. Congestion of the meninges is commonly seen at autopsy. These changes in the brain are characteristic of cases of Rocky Mountain spotted fever in the South and East, but as yet have not been demonstrated in cases occurring in the West.

Thrombosis of the small arterioles of the heart, liver, pancreas, spleen, kidney, bladder, lymph nodes and gastrointestinal tract are fairly frequent findings, while acute necrosis and cloudy swelling of the myocardium, liver and pancreas are less often observed. Acute splenitis, toxic nephrosis, and petechial lesions in serous and mucous membranes are rather frequent findings. Hemorrhage into the left rectus muscle has been reported.⁶⁴ Bronchopneumonia is a usual finding at autopsy in the cases of the South, while peribronchial hemorrhage and small pulmonary infarcts occur less frequently. Thrombosis of the larger veins is not an uncommon sequel.

CLINICAL FINDINGS. Rocky Mountain spotted fever has an incubation period averaging from two to five days, but in the milder cases varying from three to fourteen days.⁶⁵ There may be a prodromal period of two or three days characterized by symptoms of mild toxicity, such as anorexia, malaise, irritability and chilliness. The onset⁶⁶ is usually sudden and is accompanied by a chill, rapidly ascending temperature, severe headache, great malaise and generalized muscular aching, often most pronounced in the lumbar region. These symptoms are indicative of the considerable degree of toxicity that is present in a majority of the cases soon after the onset. The temperature varies from 100 to 105 F., is of the daily morning remittent type and persists in the average case from fourteen to twenty-one days, or longer. On the fifth or sixth day, or as early as the third or as late as the seventh day, a macular rose-colored rash makes its appearance on the wrists and ankles, less often on the forehead, and, in the majority of cases, spreads toward the trunk in a centripetal fashion. Soon the rash involves the face, scalp, back, chest and abdomen, as well as the extremities, including the palms and soles, and presents a mottled, dusky appearance. The individual maculas measure from 2 to 6 mm. in diameter, fade in the morning when the temperature is down and reappear in the afternoon with the rise in temperature. The lesions of the skin are contingent upon the widespread vascular lesions. About the end of the second week the lesions in the integument become definitely petechial in all but the mildest cases; this condition may be caused in some instances by thrombocytopenia⁶⁸ as well as vascular participation. Widespread vascular lesions in the central nervous system and the great toxicity characteristic of the infection explain the symptoms of headache, irritability, aphasia, deafness and muscular incoordination that are often present in these cases. Nausea, vomiting and intestinal hemorrhage are indicative of involvement of the vascular system of the gastrointestinal tract; acute ileus has been reported.

Besides the rash described, edema of the face and extremities is sometimes present, reflecting the widespread arteriolar and capillary damage in the skin and other areas resulting in a loss of plasma into interstitial fluid. Occasionally the edema may become generalized. In the more severe cases the rash may

become purpuric or hemorrhagic. Necrosis of the scrotum, prepuce, fingers, toes, ears and areas of the skin over bony prominences occurs in the extreme cases. There may be muscular rigidity, tremor, or opisthotonos,⁶³ and examination of the reflexes may reveal signs of involvement of the upper motor neurons, which are, namely, rigidity of the neck, a positive Kernig sign, a positive Babinski sign, hyperactive deep reflexes and absence of superficial reflexes. Hyperesthetic areas of the skin and pain on palpation over peripheral nerves may predicate involvement of these nerves or a spinal segment. Insomnia and restlessness may be outstanding, and delirium or stupor are commonly present in the more toxic cases. Convulsions sometimes occur, and true coma often presages a lethal ending.

The mucous membranes of the oral cavity and the pharynx sometimes present an enanthema, and evidence of epistaxis may be noted in the nares. Conjunctivitis is almost invariably present. A generalized lymphadenopathy is commonly noted. The spleen is often palpable on the third day or later. The pulse usually presents a tachycardia consistent with the rise in temperature, but in fatal cases the pulse becomes rapid and weak, an indication of peripheral vascular collapse. Jaundice and a palpable liver may be present on the basis of an acute hepatitis, suggesting hepatic insufficiency. Examination of the lungs may reveal a few scattered rales, pointing toward a bronchitis, and the additional findings of dyspnea and cyanosis may be indicative of a bronchopneumonia. In most cases the temperature begins falling by lysis early in the third week and usually reaches normal by the middle or end of that week. During convalescence a branny desquamation of the skin is a usual manifestation, and scar tissue may develop in the skin if ulceration has occurred.

Rocky Mountain spotted fever presents considerable variation in its severity. Mild ambulatory and abortive forms are observed which may or may not exhibit a rash. In mild cases the rash and fever may terminate within two weeks, while in the abortive cases recovery may be effected in less than a week. In fulminating cases presenting an overwhelming toxicity death may supervene in three or four days, and a rash may not occur. Large ecchymotic areas may, however, appear in the integument. In these cases, there is involvement of the central nervous system to a

decided degree. The rash in Rocky Mountain spotted fever may occasionally begin on the trunk and proximal portions⁶³ of the extremities, leaving the distal aspect uninvolved. A case resembling erythema nodosum was reported recently.⁶⁷

COMPLICATIONS. Complications of Rocky Mountain spotted fever are not rare. Bronchopneumonia has been mentioned and occurs frequently in the more severe cases. The pneumonic process in the lung sometimes becomes confluent and presents a massive lobar involvement. Abscess⁶⁸ of the lung has been reported. Phlebitis is fairly frequent, and hemiplegia resulting from cerebral thrombosis has been reported, mostly in the upper age group. Acute nephritis is said to occur. Conjunctivitis is common, and iritis occurs rarely. Hiccough may be a distressing complaint. Deafness is a fairly frequent sequel. Concurrent infections of streptococcic septicemia and tularemia occur. In two cases of concurrent tularemia reported by Parker, Philip and Jellison,⁶¹ the patient did not survive.

LABORATORY DATA. As in endemic typhus fever, the diagnosis of Rocky Mountain spotted fever may be made on clinical grounds alone or with the addition of a positive Weil-Felix reaction. In the South, however, where the two diseases coexist, it is best to make the diagnosis with the aid of tests by animal inoculation. The white blood cell count varies from 12,000 to 30,000, in contrast to the leukopenic or normal blood count most frequently seen in endemic typhus. A moderate to decided shift toward immaturity is the usual change in the differential count. Examination of the spinal fluid gives negative results. The Weil-Felix test is performed in the manner described for typhus fever. Proteus strains OX₁₉ and OX₂ both should be used, as the ability to agglutinate either strain varies with different serums. A positive agglutination of 1:320 with one or both strains is diagnostic, and a 1:160 agglutination is suggestive. Parker and his associates⁶¹ suggested taking samples of blood early in the disease, one on the fifteenth day and another on the twenty-second day. If examination of the first sample gives negative results, a rising agglutination titer up to 1:160 is highly suggestive of Rocky Mountain spotted fever. Inoculation of guinea pigs should be made early in the disease with 5 cc. of the patient's blood injected intraperitoneally, as described under ende-

mic typhus. Usually a pronounced febrile reaction or death of the animal results, although there is a wide variation in febrile response and fatality rates with different strains. Characteristically, in the male guinea pig a scrotal reaction is produced, which begins on the third or fourth day of temperature response. A macular scrotal rash, which may coalesce, and edema are noted, while necrosis of the lesions with formation of scar tissue later completes the picture.

It has been suggested that endemic typhus and Rocky Mountain spotted fever may be differentiated by inoculation of rabbits with blood from suspected cases. Rocky Mountain spotted fever produces agglutinins in rabbits for both the OX₁₉ and OX₂ strains, while typhus produces agglutinins for the OX₁₉ strain only.

Protection and cross immunity tests are both of value in diagnosis and are carried out in the fashion described under endemic typhus fever. The protection test has a wider application in Rocky Mountain spotted fever than in endemic typhus.

DIFFERENTIAL DIAGNOSIS. The differentiation of Rocky Mountain spotted fever and endemic typhus has been discussed under endemic typhus fever.

Typhoid fever should not present much difficulty in differential diagnosis. The sudden onset, profuse rash, leukocytosis and positive Weil-Felix reaction in Rocky Mountain spotted fever are in contrast to the insidious onset, scanty crops of maculas, positive blood and fecal cultures, positive Widal reaction and leukopenia of typhoid. In atypical cases of either disease the diagnosis may have to be based on laboratory findings alone.

Meningococcic meningitis can be differentiated from Rocky Mountain spotted fever by the discrete character of the macular rash, palsy of the cranial nerves, signs of great meningeal irritation and involvement of the upper motor neurons, a negative Weil-Felix reaction and, finally, by cultures of the blood and spinal fluid and smears that are positive for the meningococcus. In meningococcic meningitis a pleocytosis with decreased glucose and chloride fractions is observed in the spinal fluid in addition to increased intraspinal pressure.

Measles with a complicating encephalitis may simulate Rocky Mountain spotted fever during the first few days of the disease. The confluent

morbilliform rash beginning around the hair line of the head and extending downward over the face, trunk and extremities, terminates on the third or fourth day. The typical facies, Koplik spots, leukopenia and negative Weil-Felix reaction suggest measles. If encephalitis is present, the spinal fluid may exhibit slightly increased pressure, scanty pleocytosis, a small amount of globulin and a normal or increased glucose fraction in contrast to the negative findings pertaining to the spinal fluid in Rocky Mountain spotted fever.

Dengue fever is confused only with atypical, abortive cases of Rocky Mountain spotted fever. The epidemic occurrence, short duration of approximately one week with a lag period in the temperature curve, morbilliform rash that fades quickly, leukopenia and negative Weil-Felix reaction serve to distinguish dengue from Rocky Mountain spotted fever.

Secondary syphilis might be confused at first glance. The history of chancre, finding of mucous patches or condylomas, and positive dark field or serologic evidence should make the differentiation easy here. The temperature rarely ascends greatly in syphilis, and the rash is usually of a discrete, ham-colored, nonpetechial type.

Dermatitis owing to drugs might simulate Rocky Mountain spotted fever early in its course, but the history of ingestion of a drug and the eventual clearing of the rash on its discontinuance usually result in differentiation of the two conditions.

PREVENTION AND TREATMENT. Prevention of Rocky Mountain spotted fever consists in keeping away from the tick-infested rural sections. If one is going to be exposed in the woods, high tight-fitting boots worn with riding breeches should serve as an effective blockade against ticks. Nevertheless, the body of the exposed person should be examined twice daily, especially in the posterior cervical region, a favorite site for ticks. Iodine or a silver nitrate stick should be applied to bites of the tick.

Vaccination with a vaccine prepared by Parker⁶¹ from infected ticks in a sterile fashion has been used successfully in the West for a number of years. The vaccine is administered twice in 2 cc. doses five days apart. Protection against the milder strains and partial protection against the virulent strains are accomplished. Vaccination must be repeated yearly. A vaccine has

been prepared from the rickettsia grown on embryonic chick tissues⁶⁹ and by agar tissue culture,⁷⁰ methods that have successfully protected guinea pigs against virulent doses of this rickettsia. An immune rabbit serum⁷¹ has been made that prevented the death of a large percentage of infected laboratory animals. Sulfanilamide⁵⁹ and sulfapyridine did not benefit guinea pigs infected with the rickettsia of Rocky Mountain spotted fever, and in two reports on patients⁷² no change was seen in the clinical status after sulfanilamide therapy.

AMERICAN Q FEVER

The name, American Q fever was suggested by Dyer⁷³ for a little known clinical entity in the United States similar immunologically to Australian Q fever. This rickettsial disease of Australia occurs in farmers and workers in slaughterhouses, and was first described by Derrick⁷⁴ in 1937. The insect vectors and animal reservoirs have not been identified in that country.

The causative organism of American Q fever is a filtrable virus first isolated from ticks in Montana in 1935 by Davis and Cox.⁷⁵ The virus could be cultivated on tissue cultures,⁷⁶ and rickettsia-like organisms were produced intracellularly in the cultures. Cox⁷⁷ suggested the name *Rickettsia diaporica* for this micro-organism. The rickettsia was demonstrated by Parker and Davis⁷⁸ to be transmitted by the egg, nymphal and adult stages of *D. andersoni*. Davis⁷⁹ demonstrated that *R. diaporica* could survive the tissues of the tick, *Ornithodoros turicata*, for at least one thousand and one days. It was not transmitted via the egg to the next generation, but the excrement of the tick was infectious.

Bengtson⁸⁰ recently showed the similarity of the rickettsias of Australian and American Q fevers by agglutination and agglutination-absorption tests. Further evidence of this similarity was presented in tests similar to the precipitin test, in which immune and convalescent serums with filtrates and ultrafiltrates were used.

Until last year the disease had been reported from the state of Montana only. In a recent article Cox⁸¹ stated that 11 of 27 persons employed in the Rocky Mountain Laboratory at Hamilton, Mont., had positive agglutination tests for American Q fever. In the same article he reported 72 blood samples tested in this laboratory by inoculation of guinea pigs or agglutination tests.

Nineteen furnished suggested evidence of infection. All patients except one lived in the range of *D. andersoni* in the states of Idaho, Montana, Wyoming, Nebraska, Nevada, Oregon and Washington. A rather wide geographic distribution of the disease, at least in the Northwest, is thus suggested.

An institutional outbreak^{82,83} of this disease occurred in the National Institute of Health Washington, D. C., in 1940. Fifteen cases occurred, and the rickettsia of American Q fever was isolated in three of four attempts. No known arthropod vector was discovered, and no history of close personal contact between the cases was elicited.

Recently two cases⁸⁴ were reported from Montana, one in detail, in which there was no history of the bite of a tick. From the rather meager evidence accumulated at present it is difficult to be definite regarding the mode of transmission of this disease. Ticks apparently can act as vectors, and possibly other unknown vectors exist.

The pathologic changes characteristic of the disease are little known. In one human case,⁸⁵ at autopsy the lungs presented a patchy bronchopneumonia. Microscopically there was noted a copious, fibrinous, granular exudate containing many large round mononuclear cells filling the alveolar spaces along with a few erythrocytes and fibroblasts. In one photomicrograph of material from the lung a moderate number of polymorphonuclear leukocytes were observed. Generally the alveolar walls were thickened and contained many mononuclear round cells. Grossly the spleen was large, soft and flabby, and histologically it presented a follicular hyperplasia and congested pulp containing scattered neutrophils and moderate numbers of lymphoid and plasma cells. The splenic sinuses were dilated. Rickettsias were not observed in any sections of the tissue. At autopsy similar alterations of tissue were observed in 8 inoculated monkeys. Lillie, Perrin and Armstrong⁸⁵ directed attention to the similarity of the pathologic findings in this case and in cases of bronchopneumonia of undetermined etiology reported by Kneeland and Smetana⁸⁶ and Longcope.⁸⁷

Clinically⁸² the onset of the disease is fairly sudden. Headache and general malaise may be the first symptoms, and chilliness is often noted. If the temperature ascends to a high level, chills

and sweating may be observed along with generalized aching. Nausea and vomiting have occurred, and a short nonproductive cough is common. Occasionally the cough becomes productive, and a white, thick, tenacious, scanty sputum is expectorated. Vague pains in the chest and insomnia may be among the complaints.

Physical examination in these cases is characterized by a lack of physical signs. Occasional rales in the lungs have been reported. No dyspnea has been noted. Elevation of temperature may vary from 100 to 104 F. and may persist for from five to fifteen or more days.

Roentgen examination presents the most consistent evidence of pulmonary involvement. A soft infiltrative type of lesion in the parenchyma, patchy in distribution and single or multiple in number, was noted in the roentgenograms described by Hornibrook and Nelson.⁸² Usually one lobe was involved, but occasionally multilobar distribution was observed.

The white blood count ranged from within normal limits up to 21,950. Invariably the polymorphonuclear leukocytes were increased, the differential count varying from 70 to 82 per cent. Agglutination tests for typhoid fever, paratyphoid fever A and B, tularemia and undulant fever, and the Weil-Felix reaction all give negative results in American Q fever.

Diagnosis is suggested by the clinical picture, that is, chiefly cough and persistent fever, and the scarcity of physical signs along with the pathologic changes seen in roentgenograms of the chest. Laboratory tests must be undertaken to establish the diagnosis.

American Q fever can be differentiated in the laboratory by animal inoculation, cross immunity and protection tests, and agglutination reactions. The injected guinea pig, after an incubation period of from two to eighteen days, presents a febrile reaction of from two to eight days in duration. The guinea pig is injected with the venous blood of the patient, and nonspecific inflammatory thickening of the skin occurs at the site of injection. Death of the animal is common, and an enlarged spleen is the chief finding at autopsy. White rabbits and mice are susceptible to inoculation.

Cross immunity and protection tests show similar immunologic properties of the rickettsias of American and of Australian Q fever. There is no cross immunity or protection exhibited between the rickettsia of American Q fever and that of

Rocky Mountain spotted fever or endemic typhus fever. Agglutination of *R. diaporica* with the patient's serum in titers of 1:80 to 1:160 is probably diagnostic of the disease, but at the present time little has appeared in the literature regarding the agglutination test.

At present nothing is known pertaining to the treatment of the disease in man. In guinea pigs, however, Bengtson⁸⁸ produced successful active immunity with vaccines prepared from the liver and spleen of inoculated guinea pigs and mice. Adequate passive immunity was produced by the injection of immune and hyperimmune serums of guinea pigs and rabbits.

Although relatively few data have been accumulated pertaining to American Q fever and though animal reservoirs are unknown, it has been established that the tick is infected in nature. One may assume, therefore, the possibility of cases being discovered in the future from tick-infested areas in the South and other parts of the United States.

SUMMARY

A review of endemic typhus fever and Rocky Mountain spotted fever in the South is presented. Historical and bacteriologic data, pathogenesis, pathologic changes, clinical findings, complications, laboratory data, differential diagnosis, prevention and treatment are discussed. American Q fever is likewise considered in brief.

BIBLIOGRAPHY

1. Pinkerton, H.: The Diagnosis and Classification of the Rickettsial Diseases, in *Virus and Rickettsial Diseases*, Cambridge, Harvard University Press, 1940.
2. Wolbach, S. B.: The Rickettsial Diseases; A General Survey, in *Virus and Rickettsial Diseases*, Cambridge, Harvard University Press, 1940.
3. Dyer, R. E.: Similarity of Australian "Q" Fever and a Disease Caused by Infectious Agent Isolated from Ticks in Montana, *Pub. Health Rep.* 54:1229-1237 (July 7) 1939.
4. Gerhard, W. W.: On Typhus Fever, *Am. J. Med. Sci.*, Nov. & Feb. 1836-37, p. 289.
5. Smith, T., and Kilborne, F. L.: Investigations into the Nature, Causation and Prevention of Southern Cattle Fever, *Rep. Bureau of Animal Industry* 1891-2, Washington, 8-9:177.
6. Maxey, E. E.: Some Observations on the So-Called Spotted Fever of Idaho, *Med. Sentinel* 7:433, 1899.
7. McCalla, L. P.: Direct Transmission from Man to Man of the Rocky Mountain Spotted (Tick) Fever, *Med. Sentinel* 16:87, 1908.
8. Ricketts, H. T.: The Study of Rocky Mountain Spotted Fever (Tick Fever?) by Means of Animal Inoculations, *Contr. to Med. Sci.* 1911, p. 278.
9. Ricketts, H. T.: The Transmission of Rocky Mountain Spotted Fever by the Bite of the Wood Tick, *Contr. to Med. Sci.*, 1911, p. 288.
10. Ricketts, H. T.: Observation on the Virus and Means of Transmission of Rocky Mountain Spotted Fever, *Contr. to Med. Sci.*, 1911, p. 299.

11. King, W. W.: Experimental Transmission of Rocky Mountain Spotted Fever by Means of the Wood Tick. Pub. Health Rep. **21**:863, 1906.
12. Ricketts, H. T.: The Role of the Wood Tick in Rocky Mountain Spotted Fever and the Susceptibility of Local Animals to the Disease, Contr. to Med. Sci., 1911, p. 312.
13. Ricketts, H. T. and Wilder, R. M.: The Transmission of the Typhus Fever of Mexico (*tabardillo*) by Means of the Louse, J.A.M.A. **56**:1304, 1910.
14. Ricketts, H. T. and Wilder, R. M.: The Relation of Typhus Fever to Rocky Mountain Spotted Fever, Arch. Int. Med. **5**:361, 1910.
15. Brill, N. E.: An Acute Infectious Disease of Unknown Origin, Am. J. Med. Sci. **139**:484, 1910.
16. Brill, N. E.: Pathological and Experimental Data Derived from a Further Study of an Acute Infectious Disease of Unknown Origin, Am. J. Med. Sci. **142**:196, 1911.
17. Nicolle, E., Comte, C. and Conseil, E.: Transmission experimentale du typhus exanthematique par le pou du corps, Compt. rend. Acad. d. sc.; Paris, **149**:486, 1909.
18. Maver, M. B.: Transmission of Spotted Fever by the Tick in Nature, J. Infect. Dis. **8**:327, 1911.
19. Maver, M. B.: Transmission of Spotted Fever by Other Than the Montana and Idaho Ticks, J. Infect. Dis. **8**:421, 1911.
20. Anderson, J. F., and Goldberger, J.: The Experimental Demonstration of the Identity of So-Called Brill's Disease to Typhus Fever, Proc. Soc. Exper. Biol. & Med. **9**:66, 1911-12.
21. Dyer, R. E.: Rickettsioses of North America (James M. Anders lecture) Tr. & Stud. Coll. Physicians Philadelphia **7**:232-259 (Dec.) 1939.
22. Paullin, J. E.: Typhus Fever with a Report of Cases, South. M. J. **6**:36, 1913.
23. Newell, L. B. and Allen, W.: Typhus Fever; a Report of Four Cases, South. M. J. **7**:564, 1914.
24. McNeil, H. L.: Endemic Typhus Fever in South Texas, Texas State M. J. **12**:188 (Aug.) 1916.
25. Maxcy, K. F., and Havens, L. C.: Series of Cases Giving Positive Weil-Felix Reaction, Am. J. Trop. Med. **3**:495-507 (Nov.) 1923.
26. Maxcy, K. F.: Endemic Typhus Fever of South-eastern United States; Reaction of Guinea Pig, Pub. Health Rep. **44**:589-600 (Mar. 15) 1929.
27. Baker, J. N.; McAlpine, J. G., and Gill, D. G.: Endemic Typhus in Alabama, Pub. Health Rep. **50**:12-21 (Jan. 4) 1935.
28. Dyer, R. E., and others: Experimental Transmission of Endemic Typhus Fever of United States by Rat Flea *Xenopsylla Cheopsis*, Pub. Health Rep. **46**:2481-2499 (Oct. 16) 1931.
29. Rumreich, A.; Dyer, R. E., and Badger, L. F.: Typhus-Rocky Mountain Spotted Fever Group; Epidemiological and Clinical Study in Eastern and South-eastern States, Pub. Health Rep. **46**:470-480 (Feb. 27) 1931.
30. Dyer, R. E.; Badger, L. F. and Rumreich, A.: Rocky Mountain Spotted Fever (Eastern Type); Transmission by American Dog Tick (*Dermacentor variabilis*) Pub. Health Rep. **46**:1403-1413 (June) 1931.
31. Badger, L. F.; Dyer, R. E. and Rumreich, A.: Infection of Rocky Mountain Spotted Fever Type; Identification in Eastern Part of United States, Pub. Health Rep., **46**:463-470 (Feb. 27) 1931.
32. Boyd, H.: Rocky Mountain Spotted Fever; Report of Case, J. M. A. Alabama **1**:387-389 (Apr.) 1932.
33. Kemp, H. A., and Grigsby, C. M.: Occurrence and Identification of Infection of Rocky Mountain Spotted Fever Type in Texas, Texas State J. Med. **27**:395-398 (Sept.) 1931.
34. Crutcher, J. S., Jr.: Rocky Mountain Spotted Fever, South. M. J. **26**:415-417 (May) 1933.
35. Litterer, W.: Rocky Mountain Spotted Fever (Eastern Type) In Southern States; Report of 6 Cases in Tennessee, South. M. J. **26**:407-415 (May) 1933.
36. Milam, D. F.: Rocky Mountain Spotted Fever in North Carolina, South. M. J. **27**:788-792 (Sept.) 1934.
37. Snider, T. J.; Dare, L. A. and Caudill, F. W.: Rocky Mountain Spotted Fever in Kentucky; One Case Report, Kentucky M. J. **37**:190-191 (May) 1939.
38. Lumsden, L. L., and Tucker, C. B.: Clinical and Epidemiological Features and Differential Diagnosis of Rocky Mountain Spotted Fever and Endemic (Murine) Typhus Fever, J. Tennessee M. A. **32**:339-341 (Oct.) 1939.
39. L'Engle, E. M., Director, Bureau of Vital Statistics, Florida State Board of Health: Personal Communication.
40. Zinsser, H.: Epidemiology and Immunity in Rickettsial Diseases, in Virus and Rickettsial Diseases, Cambridge, Harvard University Press, 1940.
41. Zinsser, H., and Ruiz Castaneda, M.: Method of Obtaining Large Amounts of Rickettsia Provaceki by X-Ray Radiation of Rats, Proc. Soc. Exper. Biol. & Med. **29**:840-844 (Apr.) 1932.
42. Nigg, C., and Landsteiner, K.: Studies on Cultivation of Typhus Fever Rickettsia in Presence of Live Tissue, J. Exper. Med. **55**:563-576 (Apr.) 1932.
43. Zinsser, H.; Fitzpatrick, F. K., and Wei, H.: Study of Rickettsiae Grown on Agar Tissue Cultures, J. Exper. Med. **69**:179-190 (Feb.) 1939.
44. Pinkerton, H., and Bessey, O. A.: Loss of Resistance to Murine Typhus Infection Resulting from Riboflavin Deficiency in Rats, Science **89**:368-370 (Apr. 21) 1939.
45. Dyer, R. E.; Ceder, E. T.; Rumreich, A., and Badger, L. F.: Experimental Transmission of Endemic Typhus Fever of United States by Rat Flea, Pub. Health Rep. **46**:2415-2416 (Oct. 9) 1931.
46. Craig, C. F., and Faust, E. C.: Clinical Parasitology, 2nd ed. (Chapts. 31, 32, 38), Philadelphia: Lea & Febiger, 1940.
47. Brigham, G. D.: Strain of Endemic Typhus Fever Isolated from Field Mouse, Pub. Health Rep. **52**:659-660 (May) 1937.
48. Brigham, G. D., and Dyer, R. E.: Endemic Typhus Fever in Native Rodents, J.A.M.A. **110**:180-184 (Jan. 15) 1938.
49. Brigham, G. D.: Endemic Typhus Virus in Mice, Pub. Health Rep. **53**:1251-1256 (July 22) 1938.
50. Van Valzah, R.: Diseases due to Rickettsia. In: Internal Medicine, by Muser, J. H., Philadelphia: Lea and Febiger, 1938, p. 211.
51. Goodman, C.: Thrombo-angiitis Obliterans and Typhus: Evidence of Etiologic Relationship, Arch. Surg. **35**:1126-1144 (Dec.) 1937.
52. Castaneda, M. R.: Antigenic Relationship Between Bacillus Proteus X-19 and Rickettsiae; Study of Antigenic Composition of Extracts of Bacillus Proteus X-19, J. Exper. Med. **62**:289-296 (Sept.) 1935.
53. Lillie, R. D.; Dyer, R. E., and Topping, N. H.: Cerebral Pathology in Rodents in Endemic Typhus and Rocky Mountain Spotted Fevers, Pub. Health Rep. **54**:2137-2148 (Dec. 1) 1939.
54. Veintemillas, F.: Vaccination against Typhus Fever with the Zinsser-Castaneda Vaccine, J. Immunol. **36**:339-348 (May) 1939.
55. Zinsser, H., and Ruiz Castaneda, M.: Studies on Typhus Fever, Passive Immunization of Guinea Pigs, Infected with European Virus, with Serum of Horse Treated with Killed Rickettsia of Mexican Type, **59**:471-478 (Apr.) 1934.
56. Topping, N. H.: Experimental Rocky Mountain Spotted Fever and Endemic Typhus Treated with Prontosil or Sulfapyridine, Pub. Health Rep. **54**:1143-1147 (June 30) 1939.
57. Cooper, M. L., and others: Report of Two Cases of Rocky Mountain Spotted Fever in Ohio, Pub. Health Rep. **53**:1775-1779 (Oct. 7) 1938.
58. Topping, N. H., and Dyer, R. E.: Highly Virulent Strain of Rocky Mountain Spotted Fever Virus Isolated in Eastern United States, Pub. Health Rep. **55**:

728-731 (Apr. 26) 1940.

59. Florman, A. L., and Hafkenschiel, J.: Eastern Variety of Rocky Mountain Spotted Fever; Experiences on Adult Medical Service of Johns Hopkins Hospital Including Report of Fatal Case Showing Thrombocytopenia, *Bull. Johns Hopkins Hosp.* **66**:123-133 (Feb.) 1940.

60. Cox, H. R.: Use of Yolk Sac of Developing Chick Embryo as Medium for Growing Rickettsiae of Rocky Mountain Spotted Fever and Typhus Groups, *Pub. Health Rep.* **53**:2241-2247 (Dec. 23) 1938.

61. Parker, R. R.; Philip, C. B., and Jellison, W. L.: Rocky Mountain Spotted Fever; Potentialities of Tick Transmission in Relation to Geographic Occurrence in United States, *Am. J. Trop. Med.* **13**:341-379 (July) 1933.

62. Parker, R. R.: Rocky Mountain Spotted Fever, *J.A.M.A.* **110**:1185 (Apr. 9) 1938.

63. Lillie, R. D.: Pathology of Eastern Type of Rocky Mountain Spotted Fever, *Pub. Health Rep.* **46**:2840-2859 (Nov. 27) 1931.

64. Bauersfeld, E. H.: Rocky Mountain Spotted Fever with Unusual Features, *J.A.M.A.* **112**:1819-1820 (May 6) 1939.

65. Hampton, B. C., and Eubank, H. G.: Rocky Mountain Spotted Fever; Geographical and Seasonal Prevalence, Case Fatality, and Preventive Measures, *Pub. Health Rep.* **53**:984-990 (June 17) 1938.

66. Gordon, J. E.: The Clinical Features of Rickettsial Diseases, in *Virus and Rickettsial Diseases*, Cambridge, Harvard University Press, 1940.

67. Brunsting, L. A., and Dry, T. J.: Rocky Mountain Spotted Fever; Report of Cases Simulating Erythema Nodosum, *Proc. Staff Meet., Mayo Clin.* **14**:737-740 (Nov. 22) 1939.

68. Carey, T. N.: Diagnosis and Treatment of Rocky Mountain Spotted Fever in the East, *M. Clin. North America* **23**:527-539 (Mar.) 1939.

69. Cox, H. R.: Rocky Mountain Spotted Fever; Protective Value for Guinea Pigs of Vaccine Prepared from Rickettsiae Cultivated on Embryonic Chick Tissue, *Pub. Health Rep.* **54**:1070-1077 (June 16) 1939.

70. Fitzpatrick, F. K.: Vaccination Against Spotted Fever with Agar-Tissue Cultures, *Proc. Soc. Exper. Biol. & Med.* **42**:219-220 (Oct.) 1939.

71. Topping, N. H.: Rocky Mountain Spotted Fever; Treatment of Infected Laboratory Animals with Immune Rabbit Serum, *Pub. Health Rep.* **55**:41-46 (Jan. 12) 1940.

72. Shapiro, N., and Ashe, W. F.: Rocky Mountain Spotted Fever in Ohio; Report of Case, *Ohio State M. J.* **35**:1206-1209 (Nov.) 1939.

73. Dyer, R. E.: Personal Communication, June 1940.

74. Derrick, E. H.: "Q" Fever, New Fever Entity, Clinical Features, Diagnosis and Laboratory Investigation, *M. J. Australia* **2**:281-299 (Aug. 21) 1937.

75. Davis, G. E., and Cox, H. R.: A Filter-Passing Infectious Agent Isolated from Ticks: Isolation from *D. Andersoni*, Reactions in Animals and Filtration Experiments, *Pub. Health Rep.* **53**:2259, 1938.

76. Cox, H. R.: A Filter-Passing Infectious Agent Isolated from Ticks: Description of Organism and Cultivation Experiments, *Pub. Health Rep.* **53**:2270, 1938.

77. Cox, H. R.: Studies of a Filter-Passing Infectious Agent Isolated from Ticks: Further Attempts at Cultivation in Cell-Free Media; Suggested Classification, *Pub. Health Rep.* **54**:1822, 1939.

78. Parker, R. R., and Davis, G. E.: A Filter-Passing Infectious Agent Isolated from Ticks: Transmission by *D. Andersoni*, *Pub. Health Rep.* **53**:2267, 1938.

79. Davis, G. E.: Rickettsia Diaporica: Its Persistence in Tissues of *Ornithodoros Turicata*, *Pub. Health Rep.* **55**:1862-1864 (Oct. 11) 1940.

80. Bengtson, I. A.: Immunological Relationships Between Rickettsiae of Australian and American "Q" Fever, *Pub. Health Rep.* **56**:272-281 (Feb. 14) 1941.

81. Cox, H. R.: Rickettsia Diaporica and American Q Fever, *Am. J. Trop. Med.* **20**:463, 1940.

82. Hornbrook, J. W., and Nelson, K. R.: An Institutional Outbreak of Pneumonitis, I. Epidemiologic and Clinical Studies, *Pub. Health Rep.* **55**:1936, 1940.

83. Dyer, R. E.; Topping, N. H., and Bengtson, I. A.: An Institutional Outbreak of Pneumonitis: II. Isolation and Identification of Causative Agent, *Pub. Health Rep.* **55**:1945, 1940.

84. Hesdorffer, M. B., and Duffalo, J. A.: American Q Fever, *J.A.M.A.* **116**:1901 (Apr. 26) 1941.

85. Lillie, R. D.; Perrin, T. L., and Armstrong, C.: Institutional Outbreak of Pneumonitis, Histopathology in Man and Rhesus Monkeys in Pneumonitis Due to Virus of "Q" Fever, *Pub. Health Rep.* **56**:149-155 (Jan. 24) 1941.

86. Kneeland, Yale, and Smetana, H. F.: Current Bronchopneumonia of Unusual Character and Undetermined Etiology, *Bull. Johns Hopkins Hosp.* **67**:229, 1940.

87. Longcope, W. T.: Bronchopneumonia of Unknown Etiology (Variety X): A Report of Thirty-Two Cases with Two Deaths, *Bull. Johns Hopkins Hosp.* **67**:268, 1940.

88. Bengtson, I. A.: Studies on Active and Passive Immunity in "Q" Fever Infected and Immunized Guinea Pigs, *Pub. Health Rep.* **56**:327-345 (Feb. 21) 1941.

Huntington Bldg.

THE PUBLIC HEALTH CONTROL OF GONORRHEA

L. C. GONZALEZ, M.D.
JACKSONVILLE

After six years of fairly constant effort to publicize throughout the breadth of the land the problems of venereal disease existing in the country and to awaken both a lay and professional conscience to the necessity of taking immediate action, the unalterable fact remains that although some progress has been made towards the eventual control of syphilis, apparently little headway has been made towards the control of gonorrhea. It may be that this poor showing is partly the fault of the officials of public health organizations. In bringing before the public facts on venereal diseases, we have made syphilis the star of the story, featuring all of its characteristics, and in our enthusiasm to expose this scourge, we have relegated gonorrhea to the background, allowing it to continue its sinister course with impunity. It is appropriate at this time to give this other scourge some deserved attention and to consider, in view of the recent introduction of new chemotherapeutic allies, a practical application of the public health control of gonorrhea. This consideration is all the more urgent now because our present national military preparations are creating, and will continue to create acute problems relating to venereal disease, which will require immediate and effective counteraction.

Director, Division of Venereal Disease Control, Florida State Board of Health.

Read before the Florida Health Officers' Meeting, Jacksonville, April 28, 1941.

N. A. Nelson, Director of the Division of Genitoinfectious Diseases, Massachusetts Department of Health, recently said:

What we may now do for the control of the genito-infections is limited only by our knowledge of them, the rapidity with which we can teach people what we know, the funds which we can acquire for control purposes, and the sincerity and energy with which we pursue the objective. To a very considerable degree, the first of these limitations pivot upon the last. We can influence the rate at which research produces more knowledge, at which the public is enlightened, and at which working funds are obtained by the sincerity and energy with which we pursue the objective. It is the will to do the job that counts.

To the end that we who are officially responsible may face this problem boldly, let us analyze both the negative and the positive attitude held by public health officials, as well as by private practitioners. It has been expressed many times that we cannot hope to control gonorrhea on the same scale as syphilis because we lack reliable medical diagnostic and therapeutic procedures. The argument is often proposed that since the disease is so widespread and intimately related to the sexual habits of the individual, it is practically impossible to make any headway until more accurate scientific methods are devised. It has been admitted by many that previous to the introduction of the sulfonamides, public health control and, for that matter, the individual care of patients with gonorrhea presented such tremendous problems that it was considered a waste of energy to attempt a program of public health control. This attitude so permeated public health thinking that even now with a wider horizon opened up by the enlistment of the newer chemotherapeutic allies, many continue to be defeatists.

With the introduction of sulfanilamide and its application in the treatment of gonorrhea, a high degree of optimism infected many persons. The first reports glowingly declared that sulfanilamide was the wonder drug of the age. Gonorrhea would be conquered. A specific for its cure had been found. It was not long, however, before failures of cures and relapses appeared, and enthusiasm was somewhat dampened. Nevertheless, sulfanilamide produced in medical thought a more positive and healthier attitude towards gonorrhea, which may well lead to its complete subjugation. Lately another member of the sulfonamides, sulfathiazole, is proving superior in its therapeutic power and although we are more cautious in our elation, it may well be the drug that will do the trick.

The fact remains that we are not accomplishing control of venereal disease, but of syph-

ilis. Although the prevalence of syphilis is great, the prevalence of gonorrhea is greater. Our reports on gonorrhea are a farce. While we can demonstrate statistical reports on syphilis in glowing terms, we sheepishly avoid discussion of statistical studies on gonorrhea. Nevertheless, we are committed to the public health control of venereal diseases and, therefore, should include all the venereal diseases in our objective.

We are all aware of the fact that gonorrheal infections are more numerous than those of syphilis. It would be foolhardy in the face of poor reporting to approximate the actual number of cases existing. But we do know that the problem of gonorrhea is as pressing, if not more pressing, than that of syphilis. In reports received from military areas, where all persons infected are reported, infections owing to gonorrhea outnumber those of syphilis at a ratio of seven to one. These figures demonstrate that in order to gear our program to the exigencies of national defense, we must well include an effective program of gonorrhea control.

In the Section on the Public Control of Gonorrhea, which met during the Conference of Venereal Disease Control in 1937, the need to include as adequate a program of control for gonorrhea as for syphilis was emphasized. It was recognized that like problems need to be solved with the same resources and personnel. As a matter of fact, the epidemiologic aspect of gonorrhea is much simpler than that of syphilis. On account of the shorter period of incubation and the appearance of more obvious clinical manifestations, especially in men, there is a better opportunity to locate and diagnose fresh contacts before they are able to spread the infection further.

To a certain extent there was some justification in ignoring gonorrhea in a public health program, when there was nothing to offer the patient but local medication. This type of treatment requires expert knowledge, experience and undue gentleness if it is to be properly applied, not to mention requirements of space and cumbersome equipment. Excepting those health departments located in large urban communities where specialists in this field are available, it was too much to expect health departments, especially in rural sections, to devote their time to looking up contacts of infected persons and then have nothing to offer them but advice. No program based on advice only could be popular or suc-

cessful. Lately, however, this picture has changed to some extent. New drugs are proving efficacious in most instances. As they can be adapted to public health procedures, we are now prepared to handle the situation in a more effective way. We need, therefore, to view the problem from a different angle and not allow our previous pessimistic attitude to lead us to ignore the new avenues of approach. It is my firm conviction that with certain limitations all health departments, whether urban or rural, can carry on a successful program of gonorrhea control. All that is required is a mental readjustment of the health officer's attitude toward the problem. He needs to share some of the enthusiasm he shows for the control of syphilis. He must continually be alert to adapt progressive public health measures to the needs. As one health officer put it, health department clinics should serve as a means of reflex education, eventually reflecting into the community at large, creating a high standard of medical care. We are familiar with the popularity of the program for the control of syphilis in the communities. This same popularity can be created for a program of gonorrhea control to the end that infected persons voluntarily gravitate to the health department for advice or aid.

It is expected that to inaugurate a program of gonorrhea control where none has been in existence before, new problems of clinic management will be created, and in some instances discouraging results of treatment with sulfonamides will be revealed. This difficulty arises from the fact that many chronic, indigent patients with gonorrhea will flock to the clinic for relief. In these cases the patients need more than internal medication. They require a specialized form of treatment which many clinics will not be in a position to offer. This situation, in itself, will demonstrate the need of the program, for had there been a definite plan to educate the community to the importance of seeking early treatment and had there been the machinery to bring fresh contacts in for treatment, in the majority of instances with proper guidance complications would not have developed in these cases. It is to be understood also that our present medical armamentarium for the treatment of gonorrhea is far from approaching that for the treatment of syphilis. Neither do we have exact diagnostic means as with syphilis. Consequently, the program must be adapted to suit local situations. As in the case of syphilis control, the objective

should be quality instead of quantity with concentration on stimulating prompt reporting of acute cases. From a public health point of view, these are the cases that require special emphasis, and from the standpoint of clinic management, these are the cases in which sulfonamides will have their greatest effect.

It is contended that because of the limitation of diagnostic and therapeutic procedures, cures can not be insured, and the reappearance of infections may go unnoticed, thereby producing a false sense of security, both from an individual and a public health standpoint. This situation may exist in some instances in clinics not thoroughly equipped. The possibility should not be ignored, and for that reason patients should be kept under observation for two to three months after an apparent cure. One must realize, however, that the primary objective of a public health program is the prevention of new cases. If, despite the limitations, by prompt action fresh infections are rendered noninfectious with the sulfonamides even for a short period of time, many potential infections have been eliminated. Epidemiologically we have accomplished our purpose. We have located and brought under control infectious cases; the patients can be instructed to protect themselves and others during the period of infection and can be observed for any evidence of relapse.

CONCLUSION

Specifically then, what steps should the health officer take to include an active program of gonorrhea control in his health department? As stated previously, they depend a great deal on local facilities available. Where there are ample laboratory facilities and expert medical consultants, the program can be all inclusive. Where these facilities are lacking, the program should be modified to fit the facilities available. The Division of Venereal Disease Control gladly offers to all health officers its consultative service for this purpose. In all health departments, however, there should be an active program of gonorrhea control. In a general sense, the program should include the following points:

1. Concentration of effort on the groups most likely affected.
2. Equal emphasis on the dissemination of information concerning gonorrhea, as is done for syphilis. On releasing information to the press and at meetings relative to the venereal diseases,

gonorrhea should be publicized as much as syphilis.

3. Acquaintance with new advances in the diagnosis and treatment of gonorrhea so that the program may be intelligently directed.

4. Application with equal force of the same procedure relating to epidemiologic considerations, case finding and case holding that are applied to syphilis.

5. Sulfathiazole is replacing the other sulfonamides in the treatment of gonorrhea. For this reason, this drug should be the drug of choice for clinic management.

6. Adjustment of the program to include active participation of private practitioners.

In allocating to health departments future allotments of funds for control of venereal diseases a share of these allotments will be expected to be used for purposes of gonorrhea control. It is hoped, therefore, that on reporting future activities regarding control of venereal disease to the Division, the case for gonorrhea control will not be ignored.

The private physician, as well as the public health official, must no longer view gonorrhea as the illegitimate member of the family of diseases and beyond the pale of medicine, but must face the disagreeable fact that owing to their indifference, the gonococci have been riding merrily on, producing an untold amount of havoc, suffering and death, and have fattened the purses of the unethical physician, the unscrupulous druggist and the ever-demanding quack.

Box 210.

WAR RATIO OF MALE TO FEMALE BIRTHS

The normal proportion of male births over female births was even greater in every European belligerent power during the last years of World War I and for perhaps two or three years afterward, the Journal of the American Medical Association for November 22 says in answer to an inquiry. The Journal continues,

The proportion of male births increased also in many of the important European neutral countries, including Norway, Sweden, the Netherlands and (for the year 1920) Switzerland. There was an observable rise in Australia, but not in the United States or in New Zealand, among the non-European belligerents. The increase in the proportion of male births, where observed was of short duration.

As for the reasons for this increase, the Journal says that a simple explanation which seems entirely adequate has not yet been offered.

THREE CASES OF CANCER IN CHILDREN UNDER THREE YEARS OF AGE

HENRY E. PALMER, M. D.

TALLAHASSEE

It was my impression that malignant growths in childhood occur rarely, but after reviewing the literature, I find I was mistaken. Prenatal cases occurring before the fetus is fully developed have been reported. In a most interesting and scientific paper, entitled "Neoplastic Diseases in Infancy and Childhood," Blacklock¹ stated in 1934 that the occurrence of new growths in the early years of life, though rare, nevertheless merits a place in the differential diagnosis of the diseases of childhood. During the ten year period from 1924 to 1933 the total admissions to the Royal Hospital for Sick Children of Glasgow, he reported, were 58,331, and of these 1,454, or 2.47 per cent, were classified as suffering from simple or malignant tumors. Of these tumors 400 were examined microscopically.

The simple tumors, of which there were 300, showed little difference from those found in adults, he observed; there were 50 epithelial tumors, 37 mesoblastic connective tissue tumors, 151 angiomas and 62 cysts.

Creite² in 1905 reported the case of a child 2 years and 2 months old suffering from carcinoma of the penis characterized by a severe priapism that had existed for eight days prior to examination. The child died several weeks later. Among the tumors of the penis, carcinoma is one of the most frequent in occurrence, and about one third of all such cases fall within the sixth decade of life, this author observed. Of 616 cases in his series, no patient was younger than 20 years and in the literature he found no case recorded in which the patient was of the age of this child.

Five cases of ovarian tumor occurred among the 12,260 cases treated surgically at the Children's Hospital in Boston during the ten year period ending in 1929, according to Lanman.³ The ages of the children were 6½ months, 5 months, 6½ years, 10 years and 11 years. All were operated upon, and only two were living at the time of his report. A medullary carcinoma of the ovary was found at operation and successfully removed in the case of a 5 year old girl, which was reported by Rosanoff⁴ in 1911. The tumor, first noticed by the mother four

Read before the Twenty-second Annual Meeting of the Florida Railway Surgeons' Association, held at Jacksonville, April 28, 1941.

weeks prior to examination, had soon increased in size and had become painful.

In discussing the 100 cases of malignant tumor in his series of 400 cases of neoplastic disease in children, Blacklock¹ observed:

If we exclude the cerebral tumours which produce symptoms associated with intracranial pressure, all the other malignant neoplasms occurring in children have certain symptoms in common. In our series slight intermittent fever was present in all of them, and was often the first symptom to draw attention to the fact that the child was ill. There was nearly always a moderate secondary anemia, usually with a slight increase of leucocytes, some of which were immature forms, e. g. myelocytes. Emaciation such as seen in cases of malignant growths in adults was not a marked feature in these children until the later stages. On the other hand, symptoms due to pressure of the tumour were more marked than in adults; for example, abdominal tumours often produced ascites, enlargement of the superficial veins, and venous congestion of the lower limbs with oedema. Tumours arising from the kidney or suprarenal occasionally caused pressure on, or actually invaded the left spermatic vein, and so produced varicocele on that side.

Of the 100 malignant tumors in this author's series, 6 were classified as teratomas, 4 sacrococcygeal and 2 ovarian; 7 were carcinomas, 2 of the ovary, 1 of the kidney and 4 of the liver; 21 were blastocytomas of the kidney; 33 were sarcomas, 12 lymphosarcomas, 5 mixed cell, 4 spindle cell, 5 of the bone and 7 myeloid; 32 were of neurogenous origin, 20 of the glioma group and 12 sympathicoblastomas; and 1 was an endothelioma of the hemangio-endothelioma type. Of the total number, 52 occurred within the abdomen and 48 elsewhere.

This author continued:

It will be seen that sarcomata were found to be the commonest malignant tumour in early life, accounting for 33 per cent, and then in order of frequency, the nephroblastomata (21 per cent), gliomata (20 per cent), sympathicoblastomata (12 per cent), carcinomata (7 per cent), and malignant teratomata (6 per cent). Schultz (1926), on the other hand, found that malignant tumours were most frequent in the kidneys, and then, in order, in the eyes and in the bones. Warthin (1915) found that of 2,000 malignant tumours all examined microscopically 20.1 per cent occurred in children under 15 years. The largest number of malignant tumours in the present series occurred in the second and third years of life (table III), the greater frequency at these ages being due to the large number of two embryonic neoplasms, viz., nephroblastomata and sympathicoblastomata. Sarcomata and gliomata were more frequent after the third year of life than before that age. Little difference was found in the sex incidence of these malignant tumours, 52 per cent being in males and 48 per cent in females.

TREATMENT. The success of any treatment of these malignant tumours of childhood depends on early diagnosis. As far as our series of tumours is concerned, surgical removal where possible proved of limited value, as in the great majority of cases the tumour recurred. Whether a more extensive use of radium or deep x-ray therapy before and after surgical removal of the main tumour would be of any value is a point worthy of discussion. As far as literature on the subject shows, both radium and x-ray therapy have, however, not been very successful. This seems rather paradoxical, for the majority of these tumours are composed of very primitive

cells, which should be very sensitive to radium or deep x-ray therapy.

Scheffey and Crawford² reported in 1932 what they believed to be the earliest case on record of an adenocarcinoma in a child originating in or limited to the cervix uteri. The patient was a 22 month old child admitted to the hospital because of slight and intermittent vaginal bleeding of four weeks' duration, unaccompanied by pain. Prior to this disturbance, they stated, the child had appeared to be healthy and normal in every respect.

As early as 1907 Petrone³ recorded a case of primary adenocarcinoma of the liver in a 4 month old infant still nursing. The mother related that the girl, in excellent condition and developing rapidly at first, had for two months experienced a gradual and progressive loss of weight; also, during the fifteen days prior to consultation she had observed an increase in the size of the abdomen and had noticed that the stools had become fetid during this same period.

In 1935 Jamieson⁷ reported a case of primary carcinoma of the liver in a boy aged 3½ in whom the tumor was single and of the massive type. Until eight weeks before his death, he had had no illness and had been observed by this author as a bright, healthy-looking boy of fair development for his age.

In reporting a case of primary carcinoma in an infant, Pierson and Campbell⁸ mentioned a case described by Tailens in 1930 and directed attention to the report of Kilfoy and Terry, published in 1929, in which they recorded a case and reviewed 43 others, 16 of which they regarded as authenticated. These authors stressed the importance of considering carcinoma of the liver in differential diagnosis of tumors of the abdomen in children. Their patient at the age of 11 months had developed a diarrhea which proved resistant to treatment. Three months later his mother had noticed a mass in the right side of the abdomen. Examination revealed a hemoglobin estimation of 39 per cent Sahli, enlargement of the right side of the abdomen and a hard mass, apparently the right kidney although it was inseparable from the liver, which was definitely a hand's breadth below the margin of the ribs. These authors concluded that the clinical symptoms of primary carcinoma of the liver are few and in no way characteristic since they depend on the effects of pressure by the tumor and on necrosis and hemorrhage in its substance. They

added that jaundice is rare and that the metastases are intrahepatic, occasionally extending to the lungs.

A report of three cases, which occurred in my practice four or five years ago, follows:

REPORT OF CASES

Case 1. A white boy aged 4 came under my observation because he had been vomiting that morning and was unable to retain anything on his stomach. He appeared to be in good physical condition as he was plump and well nourished, and he was in no pain. After listening to his mother's account of the attack, I was about to order small doses of calomel, thinking the condition was occasioned by an upset stomach. In passing my hand over the abdomen, however, I detected an enlargement in the upper quadrant. Upon closer examination I found a mass filling the epigastrium. I informed the parents that the case required surgery. The child was taken to the hospital and operated upon immediately. An inoperable cancer involving the stomach, intestines and liver was found. The patient survived only a few hours. The mass had involved the pyloric orifice of the stomach, closing it entirely, hence the vomiting. Here was a case in which the mother had noticed nothing wrong until vomiting developed. There were no previous symptoms that a fond mother would have noticed leading her to seek aid and advice from the family physician. It was the first case of cancer that I had seen in the very young.

Case 2. A white boy aged 2 was brought to me from Wakulla County for examination. There was a history of frequent painful efforts at micturition. With each desire to urinate, he passed a few drops of urine as he danced and jumped about, crying out in great pain. I at first thought of an obstruction and introduced a catheter with no difficulty. In examining over the bladder, just above the symphysis, I felt a lump. Examination by rectum revealed a definite tumor of the bladder. Dr. Johnson opened the bladder and found a tumor about the size of a lemon, growing from the base of the bladder. It was successfully removed, but the little fellow only lived two weeks after the operation.

Case 3. A colored boy aged 15 months was brought to me by his mother. She stated that he had had trouble with the left eye some months previously. The condition had grown steadily worse and Dr. Brown had enucleated the left eyeball because of a glioma. As there was no improvement she consulted me as she did every physician in town. I had a picture made which shows the destruction wrought by the cancer. The child lived only a few weeks thereafter.

Singularly enough, prior to observing these cases, I had not in an experience of 45 years' general practice seen cancer in a patient under 28 years of age. Then within a period of six months these 3 cases came under my observation. Cancer in the young occurs more frequently than one would suppose. Certainly for youthful patients the disease is more often fatal than in elderly patients. Physicians should be on the lookout for these cancerous conditions. The earlier they are recognized, the better are the results of operation.

CONCLUSION

What is the bearing of these tumors of childhood on the more frequently occurring tumors of

adult life? Nearly all of these neoplasms of children take origin from rests of undifferentiated or embryonic cells. This suggestion was first made by Cohnheim as the explanation of all tumors, but in recent years it has been put aside in favor of the chronic irritation theory. Nevertheless, Cohnheim's hypothesis still holds good for nearly all tumors of childhood. Cell rests are of fairly common occurrence in the tissues of children, but it is difficult to explain what causes these rests to proliferate wildly and become invasive. This problem still awaits solution.

BIBLIOGRAPHY

1. Blacklock, J. W. S.: Neoplastic Diseases in Infancy and Childhood, Tr. Roy. Med.-Chir. Soc. Glasgow, pp. 127-128; 129-139, 1933-1934; in Glasgow M. J. June, July, 1934.
2. Creite: Carcinoma of the Penis in a Child Two Years Old, Deutsche Ztschr. f. Chir., 1905.
3. Lanman, T. H.: Ovarian Tumors in Childhood with Report of Five Cases, New England J. Med. 201:555-562 (Sept. 19) 1929.
4. Rosanoff, W. W.: Cancer of the Ovary in a Girl Five Years Old, Deutsche med. Wchnschr., 1911.
5. Scheffey, L. C., and Crawford, B. L.: Adenocarcinoma of Cervix in a 22 Months' Old Child, Am. J. Obst. & Gynec. 24:118-122 (July) 1932.
6. Petrone, G. A.: Primary Adenocarcinoma of the Liver in a Nursing Four Months Old, Pediatric prat., Lille, 1907.
7. Jamieson, E. N.: Primary Carcinoma of Liver in Child, Edinburgh M. J. 42:247-251 (May) 1935.
8. Pierson, M., and Campbell, M.: Case of Primary Carcinoma of Liver in Infant, J. Michigan M. Soc. 31:482-483 (July) 1932.

Box 547.

FIND SYPHILIS RATE OF 4.52% AMONG FIRST MILLION SELECTEES

"A rate of 45.2 cases of syphilis per thousand persons examined was found through physical examinations and routine serologic blood tests of the first million selectees and volunteers called for classification under the Selective Service Act of 1940," R. A. Vonderlehr, M.D., and Lida J. Usilton, M.A., Washington, D. C., reported in The Journal of the American Medical Association for October 18. They said:

The greatest prevalence of syphilis among the selectees and volunteers was reported by Florida and South Carolina, with rates of 170.1 and 156 cases per thousand respectively. The lowest rate, of 5.8 per thousand, was reported by New Hampshire. Seven Southern States and the District of Columbia reported rates in excess of 100 cases per thousand. The rate for Negroes is consistently higher than that for white men in all the states. There are indications that high rates among the white are coincidental with high rates among the Negroes. For the country as a whole, the prevalence of syphilis among Negro selectees and volunteers is thirteen times that for the white. In twenty states and the District of Columbia the Negro rate is in excess of ten times that of the white rate.

FLORIDA MEDICAL ASSOCIATION

OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., PRESIDENT.....Miami
GILBERT S. OSINCEP, M.D., PRESIDENT-ELECT.....Orlando
LUTHER W. HOLLOWAY, M.D., 1ST VICE-PRES.....Jacksonville
FREDERICK K. HERPEL, M.D., 2ND VICE-PRES. *W. Palm Beach*
WALTER C. FAYNE, M.D., 3RD VICE-PRES.....Pensacola
SHALER RICHARDSON, M.D., SEC'Y-TREAS.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., CHAIRMAN, "C," '44 Jacksonville
J. ROCHER CHAFFELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43.....West Palm Beach
WALTER C. FAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D. (EX-OFFICIO).....Miami
SHALER RICHARDSON, M.D. (EX-OFFICIO).....Jacksonville
STEWART G. THOMPSON, D.P.H. (ADVISORY).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., CHAIRMAN, "C," '43.....St. Augustine
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "F," '42.....Lake City
HOMER L. PEARSON, M.D., "B," '44.....Miami
JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H.D. YAN SCHAICK, M.D., CHAIRMAN, "C," '43 Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MC CONNELL, M.D., "D," '42.....St. Petersburg
BRUCE M. RHODES, M.D., "A," '42.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami
WALTER C. JONES, M.D. (EX-OFFICIO).....Miami
SHALER RICHARDSON, M.D. (EX-OFFICIO).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., CHAIRMAN, "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
J. N. MC LANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Orlando

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., CHAIRMAN, "C," '42 Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORRY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., CHAIRMAN, "F," '42.....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., CHAIRMAN, "C," '42 Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43 West Palm Beach
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., CHAIRMAN, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R.W.S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. FEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., CHAIRMAN, "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '43.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., CHAIRMAN, "C," '42 Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., CHAIRMAN, "F," '44 Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
GEORGE C. OYERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., CHAIRMAN, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. MCEWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYENBUG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., CHAIRMAN, "E," '44.....Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN N. ROZIER, M.D., CHM., "F," '42.....W. P. Beach
LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARDLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., CHAIRMAN, "F," '44.....Coral Gables
THOMAS N. FALMER, M.D., "C," '43.....Jacksonville
EUGENE G. FEEK, M.D., "B," '42.....Ocala
COUNCIL C. RUDOLPH, M.D., "D," '42.....St. Petersburg
WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
ALYNN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., CHAIRMAN, "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

TWELFTH—W. DUNCAN OWENS, M.D., CHM., '43 Miami Bch.
FIRST—WILLIAM C. ROBERTS, M.D., '42.....Panama City
SECOND—C. D. WHITAKER, M.D., '43.....Marianna
THIRD—J. N. PRICE, M.D., '43.....Live Oak
FOURTH—ALYA T. COBB, M.D., '42.....Gainesville
FIFTH—LUCIEN Y. DYRENFORTH, M.D., '43.....Jacksonville
SIXTH—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
SEVENTH—JOHN R. BOLING, M.D., '43.....Tampa
EIGHTH—HOWARD V. WEEMS, M.D., '42.....Sebring
NINTH—CARL D. HOFFMANN, M.D., '42.....Orlando
TENTH—E. B. HARDEE, M.D., '43.....Vero Beach
ELEVENTH—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., CHAIRMAN, "A," '43.....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFROE DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., CHAIRMAN.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. FAULLIN, M.D., (A.M.A. EX-OFFICIO).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., DELEGATE.....Jacksonville
HERBERT L. BRYANS, M.D., ALTERNATE.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., DELEGATE.....Orlando
GEORGE M. DAWSON, M.D., ALTERNATE.....West Palm Beach
(Terms expire Dec. 31, 1943)

Committees—Continued on next page

COMMITTEES—Continued

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., CHAIRMAN, 1919.....	Jacksonville
W. HENRY SPIERS, M.D., SECRETARY, 1938.....	Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902.....	Pensacola
HENRY E. PALMER, M.D., 1909.....	Tallahassee
ROBERT H. MC GINNIS, M.D., 1915.....	Jacksonville
FREDERICK J. WALTER, M.D., 1918.....	San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....	Tampa
H. MARSHALL TAYLOR, M.D., 1923.....	Jacksonville
JOHN C. VINSON, M.D., 1924.....	Tampa
JOHN S. MCEWAN, M.D., 1925.....	Orlando
H. MASON SMITH, M.D., 1926.....	Tampa
JOHN A. SIMMONS, M.D., 1927.....	Arcadia
FREDERICK J. WAAS, M.D., 1928.....	Jacksonville
HENRY C. DOZIER, M.D., 1929.....	Ocala
JULIUS C. DAVIS, M.D., 1930.....	Quincy
GERRY R. HOLDEN, M.D., 1932.....	Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....	Tampa
HOMER L. PEARSON, M.D., 1934.....	Miami
HERBERT L. BRYANS, M.D., 1935.....	Pensacola
ORION O. FEASTER, M.D., 1936.....	St. Petersburg
EDWARD JELKS, M.D., 1937.....	Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....	Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....	Century

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association, Box 1018

Jacksonville, Fla.

Telephone 5-0577

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.....	Orlando
FRANK C. METZGER, M.D.....	Tampa
HOMER L. PEARSON, M.D.....	Miami
J. H. POUND, M.D.....	Tallahassee
W. MC L. SHAW, M.D.....	Jacksonville

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., CHAIRMAN.....	Miami
SHALER RICHARDSON, M.D.....	Jacksonville
HERMAN WATSON, M.D.....	Lakeland

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., CHAIRMAN.....	Jacksonville
THEODORE F. HAHN, M.D.....	Deland
COUNCIL C. RUDOLPH, M.D.....	St. Petersburg

PRECONVENTION MEETING

Annual reports of councilors will be read at the preconvention meeting to be held in Jacksonville at the Seminole Hotel, Sunday, January 4. There will be a luncheon at 12:30 noon, followed by a general session. After being read, councilors' annual reports are to be turned in for publication in the Journal.

Sunday forenoon various regular committees of the Association will hold meetings but will adjourn in time for all to attend the luncheon and general session. The Association's Commit-

tee on Scientific Work will select the essayists who are to read papers at the annual meeting in Palm Beach. Members of the State Association who wish to make application for a place on the scientific program are urged to mail their applications at once to Dr. Herbert E. White, Box 1018, Jacksonville.

All members of the State Association are cordially invited to attend the preconvention meeting at the Seminole Hotel in Jacksonville, Sunday, January 4.

MEDICAL DIVISION OF CIVILIAN DEFENSE ISSUES BULLETIN NO. 2

The thoroughness with which the Medical Division of the Office of Civilian Defense is preparing to meet civilian emergency needs associated with disasters is shown in the Division's Bulletin No. 2, published in the November 22 issue of The Journal of the American Medical Association. This bulletin concerns itself with the equipment and operation of Emergency Medical Field Units.

The bulletin explains that an emergency medical field unit is "a group of physicians, nurses, orderlies and volunteer nurses' aides organized, equipped and trained for field casualty service in the event of a disaster."

This unit operates from what is known as a casualty station and is so organized and equipped that it can be instantly subdivided into squads and teams for service at the actual site of disaster.

The recommended equipment listed in the bulletin is uniform and conforms as far as possible with that of the Medical Department of the U. S. Army. In addition to listing the minimum medical and surgical equipment for the first aid post, which is the advance unit of the casualty station, the equipment for the latter also is enumerated. For the first aid post the working supply for one physician's team includes the instruments essential for minor surgery, drugs, dressings and bandages and suture material. The equipment for a casualty station includes bulky articles which could not be included in the equipment of the first aid post without impairing its mobility.

MEDICAL DISTRICT MEETINGS

HOLLYWOOD, BARTOW, ORLANDO

The fifth annual meetings of the Southeast, Southwest and South Central Districts were held on the afternoons of October 30, 31 and November 1, respectively. They were well attended, as indicated by the registration which follows.

SCIENTIFIC SESSIONS

The scientific programs were informative and interesting. Essayists were well prepared and their papers evoked a great deal of discussion. The programs are shown by districts.

HOLLYWOOD

Presiding, Dr. W. Duncan Owens, Junior Councilor.
 "Digitalis Poisoning," Dr. E. C. Chamberlain, Ft. Lauderdale.
 "Unrecognized Importance of Minor Injuries," Dr. Lloyd J. Netto, West Palm Beach.
 Address (By Invitation), "The Role of the Physician in Defense," Dr. Gilbert S. Osincup, Orlando.

BARTOW

Presiding, Dr. H. V. Weems, Senior Councilor.
 "The Use of the Miller-Abbott Tube in Cases of Intestinal Ileus" (Lantern Slides), Dr. David R. Murphey, Jr., Tampa.
 "Spinal Anesthesia," Dr. Joseph J. Ruskin, Tampa.
 Address (By Invitation), "Rehabilitation of Child Following Anterior Poliomyelitis," Dr. Arthur H. Weiland, Coral Gables.

ORLANDO

Presiding, Dr. Carl D. Hoffmann, Senior Councilor.
 "Relation of Vitamin B Complex to Human Pathology," Dr. T. M. Rivers, Kissimmee.
 "The Use of Eucupin Solutions in the Production of Prolonged Postoperative Analgesia in Rectal Surgery" (Lantern Slides), Dr. Don C. Robertson, Orlando.
 Address (By Invitation), "Diabetes and Arteriosclerosis," Dr. Arthur L. Walters, Miami Beach.

FIRST GENERAL SESSIONS

At Hollywood the first general session was called to order in the Palm Room of the Hollywood Beach Hotel by Dr. R. L. Elliston, senior councilor. The address of welcome was given by Dr. Frank Denniston, president of the Broward County Medical Society. Dr. C. Larimore Perry, on behalf of the Dade County Medical Society, extended an invitation to the group to meet at Miami in 1942. By unanimous vote the invitation was accepted.

At Bartow Dr. H. V. Weems, senior councilor, called the first general session to order in the auditorium of the Civic Center. After an address of welcome by Dr. Bruce R. Tinkler, president of the Polk County Medical Society, Dr. J. C. Patterson, representing the Sarasota County Medical Society, invited the members of the Southwest Medical District to meet in Sarasota

the following year. His invitation was unanimously accepted.

At Orlando Dr. C. D. Hoffmann, senior councilor, called the meeting to order in the Club Room of the Orange Court Hotel. In the absence of Dr. Frank D. Gray, president of the Orange County Medical Society, Dr. Hoffmann gave the address of welcome. On behalf of the Brevard County Medical Society, Dr. Frank N. Cooke invited the group to meet in Cocoa in 1942. By unanimous vote the invitation was accepted.

SECOND GENERAL SESSIONS

Addresses by President Walter C. Jones, Secretary Shaler Richardson and Dr. Duncan Owens, chairman of the Council, as well as verbal reports from Dr. Gilbert S. Osincup, president-elect, and the chairmen of regular committees were of especial importance. Dr. H. D. Van Schaick, chairman of the Association's Committee on Legislation and Public Policy, was present at all six district meetings to make his report.

Dr. Jones explained some of the handicaps encountered by the president in making committee appointments, which are the result of the present boundaries of committee districts. He illustrated his point by directing attention to the difference between the medical population of District B, which totals 88, and that of District F, which totals 425. An incoming president is required to make as many appointments from the 88 members in District B as from the 425 members in District F. It was suggested that the number of committee districts be reduced from six to four and that the geographical boundaries be rearranged so as to equalize, as nearly as possible, the number of members in the four districts. Dr. Jones presented an outline map showing the present setup and the suggested changes.

Dr. Richardson explained that through the cooperation of the State Medical Association, the State Board of Health and the State Board of Medical Examiners, a definite move has been made to rid the state of violators of the Medical Practice Act. The machinery has been set up under the State Board of Health, which is an arm of the state government, and the results so far have been gratifying. He requested that members report promptly all instances of violation in order that proper legal steps may be taken to bring the offenders to justice.

Dr. Owens discussed some of the difficulties encountered in securing essayists for the scientific

programs. He urged those who wished places on next year's programs to file their applications with him as early as possible. He also supplemented Dr. Jones' comments on the rearrangement of districts, and explained how the proposed changes would affect the activities of the Council and of the district meetings.

The fact that these problems were presented at each district meeting, and that advice and counsel were sought from the members, is evidence that the officers are striving to have all units of the Association working in harmony and to the best interest of the membership as a whole.

Interesting reports were given by representatives of the following committees: Medical Postgraduate Course, Legislation and Public Policy, Public Relations, Executive, Scientific Work, State Controlled Medical Institutions, and Cancer Control.

The second general session of a district meeting is informal in character and affords a splendid opportunity for the members to discuss in round table fashion the problems that beset the medical profession.

ENTERTAINMENT

The local committees on arrangements of the host societies royally entertained members, guests and ladies. A social hour was scheduled at each meeting for 6 p. m., followed at 7 p. m. by a delightful dinner. In charge of the arrangements at Hollywood were Drs. O. C. Brown, Leigh F. Robinson and R. L. Elliston; at Bartow, Drs. L. L. Lancaster, W. F. Peacock and J. G. Gilchrist; at Orlando, Drs. Charles J. Collins, R. P. Henderson and Carl D. Hoffmann.

By unanimous vote those in attendance expressed deep appreciation to the members of the entertaining societies, the hotel officials, city officials, newspapers and others who contributed to the success of the district meetings.

WOMAN'S AUXILIARY

At each of the district meetings the Woman's Auxiliary held an official meeting, with officers present from the State Auxiliary. A writeup, giving the full details in connection with the meetings of the ladies will be found on the Woman's page of the Journal.

REGISTRATION

HOLLYWOOD—DISTRICT F

The total registration was 147, of which number 103 were Association members (from this

district, 97), 8 were visitors and 36 were ladies.

Officers: W. Duncan Owens, Miami Beach, chairman of Council; R. L. Elliston, Ft. Lauderdale, senior counselor; Stewart Thompson, Jacksonville, managing director.

Coral Gables: William McKibben, Warren W. Quillian, Hillard Willis. *Ft. Lauderdale:* Robert Blessing, O. C. Brown, Russell B. Carson, E. C. Chamberlain, A. B. Connor, Anna A. Darrow, Frank Denniston, L. B. Elliston, D. W. Harris, Elliott M. Hendricks, J. A. Johnston, M. A. Lovejoy, R. H. Mayhew, Richard A. Mills, H. J. Peavy, C. A. Peterson, Leigh F. Robinson, Paul G. Shell, C. H. Sory, Lawrence L. Stepp, R. H. Stovall. *Hollywood:* Elbert McLaury. *Jacksonville:* L. Y. Dyrenforth, Robert B. McIver, Shaler Richardson, Harold D. Van Schaick.

Miami: James L. Anderson, L. L. Andrews, H. A. Barge, W. J. Barge, E. C. Brunner, C. P. Bullard, F. H. Dieterich, P. L. Dodge, L. W. Dowlen, James O. Elam, Marshall Faver, J. Raymond Graves, Winston F. Harrison, Jack Humphreys, Thomas W. Hutson, Walter C. Jones, Alexander Kushner, Carlos P. Lamar, W. T. Lanier, Frederick LeDrew, Alfred G. Levin, Taylor Lewis, George D. Lilly, J. M. McClamroch, Ed. H. Mabry, P. J. Manson, James H. Mendel, Claude G. Mentzer, R. M. Oliver, William Pallister, Homer Pearson, Nelson T. Pearson, C. Larimore Perry, Kenneth Phillips, Jack O. W. Rash, Homer A. Reese, Ralph S. Sappenfield, Joseph S. Stewart, Edwin C. Thomas, F. A. Vogt, W. H. Watters, P. B. Welch.

Miami Beach: Milton G. Bohrod, W. A. Christian, James R. Cogan, O. S. Dowlen, George N. Leonard, Robert A. Mayer, Donald G. Stannus, E. J. Thomas, Arthur L. Walters. *Miami Springs:* Estella G. Norman. *Orlando:* Gilbert S. Osincup. *Palm Beach:* S. Richard Ombres, W. Y. Sayad, B. B. Sory, Jr., W. B. Wilkins. *Pompano:* George S. McClellan, S. A. Winsor. *Raiford:* O. L. Kelley. *West Palm Beach:* Wilbur O. Arnold, W. E. Bippus, Victor Clarholm, Thomas E. Daly, F. K. Herpel, David W. Martin, K. E. Montgomery, Lloyd J. Netto, L. M. Rozier, James R. Sory, Edgar W. Stephens, William H. Weems.

Visitors—Fort Lauderdale: William J. Bailey, Otto W. Schwalb. *Jacksonville:* R. C. Hood. *Miami:* W. W. Davies, Guy Fish. *West Palm Beach:* Joseph C. Bernstein. *New York City:* Maurice A. Sturm.

Ladies—Coral Gables: Mrs. Winston Harrison, Marie Louise Smith, Mrs. H. W. Willis. *Ft. Lauderdale:* Mrs. O. C. Brown, Mrs. Russell B. Carson, Mrs. E. C. Chamberlain, Mrs. Frank Denniston, Mrs. D. W. Harris, Mrs. John Allen Johnston, Mrs. M. A. Lovejoy, Mrs. H. J. Peavy, Mrs. C. A. Peterson, Mrs. Leigh F. Robinson, Mrs. Otto W. Schwalb, Mrs. Paul G. Shell, Mrs. Lawrence Stepp, Mrs. R. H. Stovall. *Hollywood:* Mrs. Elbert McLaury. *Jacksonville:* Mrs. L. Y. Dyrenforth. *Miami:* Mrs. W. J. Barge, Mrs. P. L. Dodge, Mrs. George D. Lilly, Mrs. P. J. Manson, Mrs. Robert M. Oliver, Mrs. William Pallister. *Miami Beach:* Mrs. Martha Morrissey. *Orlando:* Mrs. Gilbert S. Osincup. *Palm Beach:* Mrs. S. Richard Ombres, Mrs. W. Y. Sayad. *West Palm Beach:* Mrs. Wilbur O. Arnold, Mrs. Victor Clarholm, Mrs. Thomas E. Daly, Mrs. F. K. Herpel, Mrs. David W. Martin, Mrs. Lloyd J. Netto. *New York—Bronxville:* Mrs. Arthur Bradley.

BARTOW—DISTRICT D

The total registration was 86, of which number 59 were Association members (from this district, 49), 6 were visitors and 21 were ladies.

Officers: W. Duncan Owens, Miami Beach, chairman of Council; H. V. Weems, Sebring, senior counselor; Stewart Thompson, Jacksonville, managing director.

Arcadia: H. P. Bevis, J. A. Simmons. *Avon Park:* I. W. Chandler. *Bartow:* J. G. Gilchrist, J. L. Hargrove, R. L. Hughes, L. L. Lancaster, W. F. Peacock, Cecil H. Wilson. *Bowling Green:* W. S. Pyatt. *Brad-*

enton: C. W. Larrabee, W. D. Sugg, W. E. Wentzel.
Coral Gables: Arthur H. Weiland. *Dunedin*: J. A. Mease. *Ft. Meade*: G. H. Carefoot. *Jacksonville*: L. Y. Dyrenforth, Robert B. McIver, J. N. Patterson, Shaler Richardson, H. D. Van Schaick. *Lakeland*: J. R. Boulware, Jr., R. L. Cline, Henry Fuller, Fred S. Gachet, J. M. Kibler, Herman Watson.

Lake Wales: B. Y. Pennington, B. R. Tinkler.
Miami: Walter C. Jones. *Orlando*: L. C. Ingram, G. S. Osincup. *St. Petersburg*: W. C. McConnell. *Sarasota*: John M. Butcher, J. E. Harris, John Jares, A. Lamar Matthews, A. O. Morton, J. C. Patterson, Millard B. White. *Sebring*: Leland H. Dame. *Tampa*: W. P. Adamson, C. A. Andrews, W. C. Blake, H. G. Cole, J. C. Dickinson, James L. Estes, Charles M. Gray, R. Bradner Mertz, Frank C. Metzger, David R. Murphey, Jr., Joseph J. Ruskin, W. W. Trice, Jr., J. C. Vinson, E. Bryant Woods. *Wauchula*: M. C. Kayton. *Winter Haven*: Waldo Horton.

Visitors—Bowling Green: J. M. Philpot. *Miami*: W. W. Davies. *Tampa*: L. W. Hewit, A. F. Massaro, Wesley W. Wilson.

Ladies—Arcadia: Mrs. H. P. Bevis, Mrs. Edith French, Mrs. John A. Simmons. *Bartow*: Mrs. J. G. Gilchrist, Mrs. J. L. Hargrove, Mrs. L. L. Lancaster, Mrs. W. F. Peacock. *Ft. Meade*: Mrs. G. H. Carefoot. *Jacksonville*: Mrs. H. D. Van Schaick. *Lakeland*: Mrs. R. L. Cline. *Lake Wales*: Mrs. B. Y. Pennington. *Miami*: Mrs. W. J. Barge, Mrs. M. A. Otterson. *Orlando*: Mrs. L. C. Ingram, Mrs. Gilbert Osincup. *St. Petersburg*: Mrs. W. C. McConnell. *Sebring*: Mrs. Leland H. Dame, Mrs. H. V. Weems. *Tampa*: Mrs. H. G. Cole, Mrs. J. C. Griffin, Mrs. Stephen Gyland.

ORLANDO—DISTRICT E

The total registration was 61, of which number 42 were Association members (from this district, 33), 4 were visitors and 15 were ladies. ,

Officers: W. Duncan Owens, Miami Beach, chairman of Council; C. D. Hoffmann, Orlando, senior councilor; Stewart Thompson, Jacksonville, managing director.

Cocoa: F. N. Cooke. *Eustis*: C. M. Tyre. *Jacksonville*: L. Y. Dyrenforth, Robert B. McIver, J. N. Patterson, Shaler Richardson, Harold D. Van Schaick. *Kissimmee*: T. M. Rivers. *Miami*: Walter C. Jones, Ralph S. Sappenfield. *Miami Beach*: Arthur L. Walters.

Orlando: Thomas C. Black, Warren A. Brooks, H. H. Caffee, C. J. Collins, H. A. Day, J. G. Economou, R. P. Henderson, Edgar E. Hitchcock, L. C. Ingram, E. L. Jewett, Hewitt Johnston, John A. Kelk, H. S. Knowles, Duncan McEwan, Fred Mathers, Louis M. Orr, G. S. Osincup, J. A. Pines, W. P. Rice, Don C. Robertson, Joseph G. Seltzer, W. E. Sinclair, W. Henry Spiers, R. D. Thompson, Richard H. Walker, Jr., Walter A. Weed. *Oviedo*: J. William Martin. *Sanford*: J. N. Tolar. *Winter Park*: Ruth S. Hart.

Visitors—Jacksonville: R. C. Hood. *Orlando*: V. Frankfurth. *Sanford*: O. L. Barks.

Ladies—Cocoa: Mrs. F. N. Cooke. *Jacksonville*: Mrs. Lucien Y. Dyrenforth, Mrs. H. D. Van Schaick. *Miami*: Mrs. W. J. Barge, Mrs. M. A. Otterson. *Miami Beach*: Mrs. Duncan Owens. *Orlando*: Mrs. Charles J. Collins, Mrs. V. Frankfurth, Mrs. L. C. Ingram, Mrs. H. S. Knowles, Mrs. Duncan McEwan, Mrs. G. S. Osincup, Mrs. W. E. Sinclair. *Sanford*: Mrs. O. L. Barks, Mrs. J. N. Tolar.

BIRTHS

Dr. and Mrs. James G. Lyerly of Jacksonville announce the birth of a son, Thomas Jackson, November 28.

Dr. and Mrs. R. L. McDaniel of Jacksonville announce the birth of a son, Jerry Wheeler, November 26.

Dr. and Mrs. B. D. Carroll of Miami announce the birth of a daughter, Beverly Ann Carroll, November 22.

STATE NEWS ITEMS

Dr. T. C. Kenaston, Cocoa, was in New York during the month of October, where he took postgraduate work.

Dr. E. H. Roberts, Jacksonville Beach, attended a national medical clinic in Minneapolis, Minn., during the month of October.

The following Florida doctors attended the Tulane postgraduate clinics at Charity Hospital in New Orleans, during the month of October: Dr. S. H. Adams, Tampa; and Dr. John E. Maines, Lake Butler.

Dr. C. C. Webb of Pensacola took postgraduate work in surgery at the Cook County Hospital in Chicago during the month of November.

Dr. Shaler Richardson, Jacksonville, tendered his resignation to Governor Holland as a member of the State Board of Health on November 3. Dr. Richardson was appointed to membership on the Board early in 1936 by Governor Sholtz and was elected president in 1941, following the death of the former president, Dr. N. A. Baltzell. In tendering his resignation, Dr. Richardson gave as his reason insufficient time to devote to the ever increasing volume of work of the State Board, and at the same time to do justice to his private practice and official duties of the Florida Medical Association.

Essayists for the scientific sessions at the Association's annual convention in Palm Beach will be selected by the Committee on Scientific Work at its meeting to be held Sunday, January 4. All members of the State Association who wish to read papers at the annual convention are urged to file their applications at once with Dr. Herbert E. White, chairman of the Committee. Dr. White has announced that no general letter calling for applications will be mailed to the entire membership of the Association, as was done last year. All applications should be addressed to Dr. Herbert E. White, Box 1018, Jacksonville.

Dr. George G. Oswalt, Mobile, Ala., was chosen president of the Gulf Coast Clinical Society at its sixth annual meeting in Pensacola, October 16. Drs. Donald G. Rafferty, Pass Christian, Miss., and Sidney G. Kennedy, Jr., Pensacola, were named vice presidents. Dr. Charles L. Rutherford, Mobile, is the secretary. The 1942 session will be held in Mobile. The program included papers by Drs. Edgar Burns, New Orleans, on "Treatment of Urinary Infections;" James S. McLester, Birmingham, "Functional Disorders of the Digestive Tract;" Philip S. Hench, Rochester, Minn., "Management of Chronic Arthritis;" and Warren T. Vaughan, Richmond, Va., "Allergic Factor in Certain Dermatoses."

Members of the Florida Medical Association who attended this meeting were:

Century: J. I. Turberville, J. S. Turberville. *Chipley:* F. M. Watson. *Crestview:* R. E. Enzor. *DeFuniak Springs:* E. L. Huggins. *Eustis:* W. L. Wood. *Graceville:* R. L. Miller. *Milton:* J. C. Holley, Rufus Thames. *Panama City:* J. M. Nixon. *Pensacola:* A. M. Ames, E. V. Anderson, J. D. Bell, Charles A. Born, Herbert L. Bryans, A. C. Carter, Gustav N. Click, J. P. Daniels, M. W. Dodson, J. H. Fellows, L. C. Fisher, H. B. Haisfield, H. O. Heath, W. P. Hixon, James M. Hoffman, S. G. Kennedy, M. A. Lischkoff, John J. McGuire, J. N. McLane, J. C. McSween, N. C. Mellen, A. E. Mock, G. W. Morse, R. G. Nobles, V. R. Nobles, W. C. Payne, J. H. Pierpont, W. S. Randall, Lee Sharp, A. L. Stebbins, R. P. Stritzinger, R. L. Sullivan, Herbert Virgin, Jr., C. C. Webb, A. W. White, W. L. Williams. *Port St. Joe:* Albert L. Ward. *Quincy:* W. W. Massey. *Tallahassee:* J. H. Pound.

Members of the State Association who attended the meeting of the American Public Health Association in Atlantic City, October 14-17, were: Drs. J. N. Patterson, William H. Pickett and Noble A. Upchurch, Jacksonville; and Dr. James R. McEachern, Tampa.

Doctors from Florida who attended the Thirty-Fifth Annual Meeting of the Southern Medical Association in St. Louis, November 10-13, were:

Century: J. K. Turberville. *Clearwater:* M. A. Nickle. *Coral Gables:* Warren W. Quillian. *Jacksonville:* J. L. Borland, Alan Brown, F. A. Copp, Frank L. Fort, F. W. Krueger, Thomas H. Lipscomb, John F. Lovejoy, Robert B. McIver, H. Marshall Taylor. *Miami:* Ralph F. Allen, James O. Elam, Walter C. Jones, James J. Nugent, Frank M. Woods. *Miami Beach:* Harold A. Ryan, Harrison A. Walker. *Miami Springs:* James R. Jeffrey, Jr. *Orlando:* E. L. Jewett, Louis M. Orr. *Pensacola:* Carol C. Webb. *Plant City:* Edgar Austin. *Tampa:* James C. Griffin, Jr., J. R. McEachern. *West Palm Beach:* Lloyd J. Netto, Harry A. Wakefield. *Winter Park:* Ruth S. Hart.

Dr. Maurice J. Rose announces the opening of additional offices at the Ingraham Building, Miami. His practice is limited to obstetrics and gynecology.

Dr. J. R. Jeffrey, Miami Springs, attended the Inter-State Postgraduate Assembly in Minneapolis, Minn., and spent three weeks at the Cook County Postgraduate Medical School in Chicago during the month of November.

Florida doctors who attended the meeting of the American College of Surgeons in Boston, November 3 to 7, were:

Bradenton: William D. Sugg. *Coral Gables:* Charles R. Burbacher. *Daytona Beach:* J. Ralston Wells. *Gainesville:* Edwin H. Andrews, John E. Maines, Jr., William C. Thomas, George C. Tillman. *Hollywood:* F. L. Snyder. *Jacksonville:* Charles B. Mabry, Kenneth A. Morris, Frederick J. Waas, E. C. Watt. *Lakeland:* S. Edgar Watson. *Miami:* Gail E. Chandler, John T. Macdonald, James J. Nugent. *Miami Beach:* Harold A. Ryan. *Orlando:* J. R. Chappell, Frank D. Gray, Palmer R. Kundert, John S. McEwan. *Tampa:* Joseph W. Taylor. *West Palm Beach:* George M. Dawson, Vale D. Stone.

COMPONENT COUNTY SOCIETIES

DADE

The regular meeting of the Dade County Medical Society was held at 8:30 p. m. on Wednesday, November 5, at the Jackson Memorial Hospital. The scientific program consisted of a talk, illustrated with lantern slides, on "Gunshot Wounds of the Abdomen" by Drs. James McClamroch and Richard Fleming. Discussors were Drs. Sam Elder and C. Larimore Perry.

DUVAL

Dr. Gerry R. Holden was principal speaker at a meeting of the Duval County Medical Society held on the evening of November 4 at the library of the State Board of Health. His subject was "Treatment of Menopausal Symptoms in Women with Especial Reference to the Use of Diethyl Stilbestrol." This paper was discussed by Drs. J. N. Patterson, S. I. Kemp, James M. Bryant, Victor Hughes and William H. McCullagh.

A resolution on the death of Dr. Robert D. May, offered by Dr. F. L. Fort, chairman of the society's fraternal relations committee, was adopted.

HILLSBOROUGH

Capt. Richard C. Cumming of the army medical corps, stationed at Lakeland, was the principal speaker at the regular meeting of the Hillsborough County Medical Society, held at the Tampa Municipal Hospital, November 4. He discussed the physical and mental care of student pilots in training.

Medical officers stationed at MacDill and Drew fields were guests of the society at this meeting.

PALM BEACH

Members of the Palm Beach County Medical Society were the guests of the medical staff at the Morrison Field Air Base Hospital on the afternoon of November 6. An inspection of the hospital and medical facilities of the base was followed by dinner at the hospital mess.

Capt. J. G. Moore, doctor in charge of the medical unit at the base, was official host, greeting Dr. W. O. Arnold, president of the society, and his fellow members.

PINELLAS

On November 6 the Pinellas County Medical Society held a dinner meeting at the Shrine Club, St. Petersburg. Two papers comprised the scientific program: "Meralgia Paraesthetica," presented by Dr. W. M. Davis, discussed by Dr. W. H. McConnell and "New Conceptions in Endocrinology," by Dr. A. J. Bieker, discussed by Dr. V. L. Hagan.

On the evening of November 20, a pediatric round table discussion was held by the society, at which Dr. C. C. Rudolph acted as moderator.

VOLUSIA

At a meeting of the Volusia County Medical Society held on the evening of November 10 at Deland, the society adopted three recommendations for the operation of the county health unit which is to be established early in January. They were:

1. Operation of the health unit under the direction of a county board of health to be appointed by the county commission and consisting of three physicians and two laymen.

2. Immunization of the indigent for smallpox and diphtheria by the health unit staff. Indigency should be decided by the physicians of the county, but with the provision that persons may apply for the immunization as indigents,

in which case their applications should be investigated by welfare workers. All children should be immunized against these two diseases. Immunization later should be extended to typhoid and other diseases.

3. The health unit should cooperate with the State Board of Health in the control of venereal diseases.

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

PLACENTA BILOBATA, TORPIN, RICHARD, AUGUSTA, GA., AND HART, B. F., WINTER PARK, FLA., AM. J. OBST. & GYNEC:42:38-49 (JULY) 1941.

Bilobate placenta occurred 355 times in all the deliveries at the University of Georgia School of Medicine, an incidence of 8 per cent. Its incidence roughly parallels that of pregnancy in general as regards age group, and does not seem related to abortion or early labor, suggesting a fortuitous rather than a pathologic endometrial cause. Bilobate placenta may vary from a small sessile appendage to a lobe equal in size to that of the primary placenta. If the extra lobe is separated from the primary lobe by membranes carrying vessels which supply the extra lobe, it is called placenta succenturiate.

In the study of these placentas it was shown that implantation of the ovum had taken place in or near a sulcus separating the two relatively flat surfaces of the anterior and posterior uterine walls. The only clinical significance which the authors noted was in cases in which the two lobes were attached anteriorly and posteriorly low in the uterine cavity to form a placenta praevia marginalis. They stated, "We are of the opinion that such an extensive condition surrounding the cervix anteriorly and posteriorly has been mistaken for placenta praevia centralis." The charts published in the body of the paper are of interest in showing the wide variation in the size of the accessory lobes.

From the study of the implantation of the placenta the authors wish to emphasize the following propositions:

- "1. Chorionic villi surrounding the implanting ovum will grow and thrive in any adequate decidual soil available on any side of the ovum.

2. Chorionic villi die and become necrotic if decidual nourishment fails or if the villi are pulled away from their original bed.

3. Villi once displaced cannot take rest in other soil."

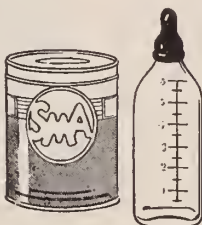


TOPICAL TREATMENT WITH SULFATHIAZOLE, SAMS, WILEY M., AND CAPLAND, LEWIS, MIAMI, ARCH. DERMAT. & SYPH. 44:226-230 (AUG.) 1941.

The authors report the use of sulfathiazole in the treatment of diseases of the skin, chiefly impetigo and ecthyma. The drug is incorporated in 5 or 10 per cent concentration in an ointment with a cod liver oil base. In 53 cases the average healing time was cut from about three weeks to one week. The action seems to be a local one and not the result of absorption of the drug through the skin. In only one case did the sulfathiazole produce any sensitization of the skin. The results demonstrated by the authors agree with those reported from other clinics.

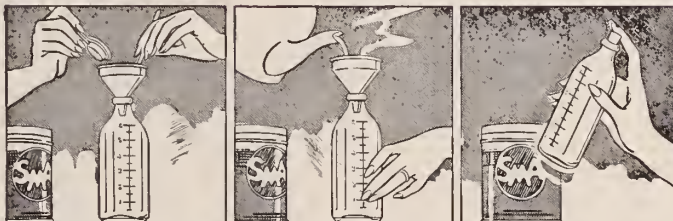
The answer To Your Infant Feeding Problem!

THIS IS WHAT S-M-A IS . .



A scientifically prepared formula for
infants deprived of breast milk.

**THIS IS HOW IT IS
PREPARED**



1. Empty one tightly packed measuring cup of S-M-A Powder into bottle.

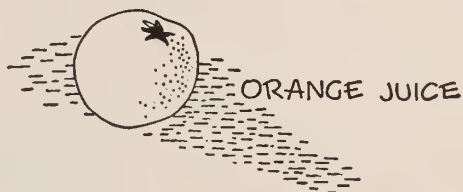
2. Add enough warm, previously boiled water to make one ounce.

3. Cap bottle and shake into solution. Feed at body temperature.

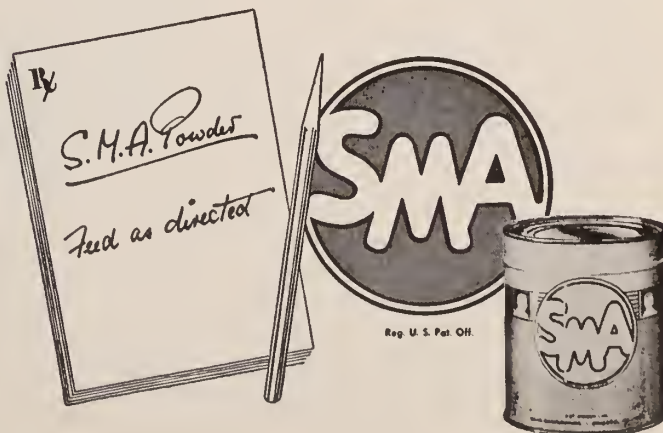
THIS IS THE WAY IT IS FED

The quantity and number of feedings in 24 hours should be the same as that taken by the normal breast-fed infant.

**THIS IS THE ONLY
SUPPLEMENT REQUIRED . .**



AND THIS (in a nutshell) is the Easy, Economical Way used by an ever-increasing number of physicians to insure excellent nutritional results.



S.M.A. CORPORATION • 8100 McCORMICK BOULEVARD • CHICAGO, ILLINOIS

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review as expedient.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1940.—This volume contains not only all of the published reports of the Council for the preceding year but reports on products which were not deemed important enough to be published in *The Journal*. Council reports may be classified in general as those of omission or rejection, preliminary reports and status reports on drugs or on various therapeutic and pharmacologic problems. Representatives of all classes appear in this volume.

There are a number of interesting reports in the "non-acceptable" category. The one on the widely exploited Neurosine of the Dios Company sounds a timely warning on the hazards of bromidism and uncontrolled hypnotic medication. The report rejecting a number of preparations of gonadotropic hormone from the serum of pregnant mares, together with the report rejecting certain ovarian and ovarian anterior pituitary preparations, attest the Council's continued critical interest in the field of endocrinology. This is also indicated in the report on Desoxycorticosterone, written by Dr. Edgar S. Gordon and adopted by the Council for publication with a statement of the Council's attitude on the present status of adrenal cortex. The Council finds adrenal cortex therapy now in an unsatisfactory and unsettled state.

Two reports relegate to the therapeutic scrap heap the drugs Isacen and Melubrin: Isacen was accepted in 1926 as a non-toxic laxative or purgative; Melubrin is an antipyretic which seemed to have promise when it was accepted in 1913 but which the manufacturer has now ceased marketing. It is interesting to note that at the time these preparations were accepted the Council expressed some misgiving which later proved justified.

Noteworthy preliminary reports are on Guanidine Hydrochloride-Calco, which has been proposed for use in the treatment of myasthenia gravis, and Acetylglucarsenobenzene, a new antisyphilitic for intramuscular use, which the Council feels should be further perfected. In its report the Council comments with approval upon the manner in which the Winthrop Chemical Company has developed the latter and studied it before even considering its commercial production.

Among the nomenclature reports are those designating "Pyridoxine" and "Pyridoxine Hydrochloride" for Vitamin B₆ and Vitamin B₆ Hydrochloride; "Sulfathiazole" for 2-Sulfanilamidothiazole and "Sulfamethylthiazole" for 2-Sulfanilamido-4-Methylthiazole. Preliminary reports on these drugs as well as on Phenothiazine and Histaminase are included.

It is difficult to choose any among the so-called status reports for special mention—all are noteworthy for one reason or another. The report on the present status of the injection treatment of hernia is a continuation of the Council's consideration of this question. The Council has reached the decision that it is necessary to condemn the exploitation of the injection treatment of hernia by manufacturers of solutions.

Another status report that must be mentioned is that on Lipocaic, a new pancreatic hormone concerned in some way with the normal transport and utilization of fat. The Council awaits development of further clinical evidence for Libocaic and expressed the opinion that the method should not be recognized for routine practice.

Mention must be made of the excellent report on organic mercurial compounds as bactericidal agents, which states the Council's conclusion that no organic mercurial compound has yet been offered that will guarantee the destruction of spores under all conditions.

Another valuable report is that on the promiscuous use of the barbiturates. This is a continuation of a previous study of the use of barbiturates in suicide. The present study is an analysis of hospital data.

One cannot even glance through a volume such as this without reflection on the great value of the Council on Pharmacy and Chemistry's work, which so richly deserves the support of all who are interested either directly or indirectly in the progress of medicine. Cloth, pp. 181. Price, \$1.00. Chicago: American Medical Association, 1941.

ADVERTISERS' NOTES

WHY MEAD JOHNSON & COMPANY COOPERATES WITH THE COUNCIL

Voluntarily, we market only Council-Accepted products because we have faith in the principles for which the Council on Pharmacy and Chemistry (and the Council on Foods) stand.

We have witnessed the three decades during which the Council has brought order out of chaos in the pharmaceutical field. For over thirty years it has stood—alone and unafraid—between the medical profession and unprincipled makers of proprietary preparations.

The Council verifies the composition and analysis of products, and substantiates the claims of manufacturers. By standardizing nomenclature and disapproving therapeutically suggestive trade names, it discourages shotgun therapy and self-medication. It is the only body representing the medical profession that checks inaccurate and unwarranted claims on circulars and advertising as well as on packages and labels.

THE "SULFA" DRUGS

In 1937 sulfanilamide became available generally and proved to be extremely useful in the treatment of infections due to *B. hemolytic streptococci* and *meningococci*. In addition, the drug soon was being employed in urinary tract infections, trachoma, chancroid, lymphogranuloma venereum, and certain cases of gas gangrene, and it demonstrated some benefit in gonorrhea, undulant fever, and actinomycosis. Approximately two years later sulfapyridine was being widely used in the treatment of pneumococcal infections and was found to be more effective than sulfanilamide against gonococci. After only another year sulfathiazole began to replace sulfapyridine because it was as effective against pneumococci and gonococci, more effective against staphylococci, and occasioned fewer reactions. In urinary tract infections sulfathiazole was superior to sulfanilamide in most cases. Now sulfadiazine is being introduced and it has the advantage of a lower index of toxicity, which makes possible the maintenance of high blood levels.

This group of drugs has become exceedingly widely employed. Soon there will be only a small proportion of the general population which has not received one of them as treatment of some variety of infection (South. M. J. 34:1214, 1941). It behooves the physician to choose carefully the most specific and least toxic one for his case. A wide variety of dosage forms have been made available by Eli Lilly and Company.

THE BORDEN COMPANY ACQUIRES MULLER LABORATORIES

The Borden Company has acquired The Muller Laboratories of Baltimore, Md., producers of Mull-Soy, a milk substitute in fluid form for use in diets of persons allergic to the proteins of cow's milk.

The laboratories will be operated under the direction of the Prescription Products Department of The Borden Company and will continue under the management of Dr. Julius F. Muller.

Mull-Soy, which is sold in drug stores on the recommendation of physicians, is in liquid form in tins of 15½ fluid ounces. It is prepared from soybean flour, soybean oil, dextrose, sucrose, calcium and sodium salts. It has been in production since 1936.

Dr. Muller obtained his B.S. degree at Rutgers University in 1922, his M.S. at the same institution in 1928, and his Ph.D., also at Rutgers, in 1930, following a Walker-Gordon Fellowship.



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*
Wyeth

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, PRESIDENT.....	<i>Miami</i>
MRS. F. W. KRUEGER, FIRST VICE-PRESIDENT.....	<i>Jacksonville</i>
MRS. R. L. CLINE, SECOND VICE-PRESIDENT.....	<i>Lakeland</i>
MRS. PAUL KELLS, CORRESPONDING SECRETARY.....	<i>Miami</i>
MRS. C. H. MURPHY, RECORDING SECY.-TREAS.....	<i>Bartow</i>
MRS. M. J. FLIPSE, HISTORIAN.....	<i>Miami</i>
MRS. L. C. INGRAM, PARLIAMENTARIAN.....	<i>Orlando</i>

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, PRESS AND PUBLICITY.....	<i>Jacksonville</i>
MRS. P. J. MANSON, HYGEIA.....	<i>Miami</i>
MRS. RUPERT STOVALL, PUBLIC RELATIONS.....	<i>Ft. Lauderdale</i>
MRS. E. M. HENDRICKS, LEGISLATION.....	<i>Ft. Lauderdale</i>
MRS. GORDON H. IRA, FINANCE.....	<i>Jacksonville</i>
MRS. T. C. KENASTON, EXHIBITS.....	<i>Cocoa</i>
MRS. CLYDE ANDERSON, ARCHIVES.....	<i>St. Petersburg</i>
MRS. GEORGE C. TILLMAN, STUDENT LOAN.....	<i>Gainesville</i>
MRS. F. W. KRUEGER, PROGRAM.....	<i>Jacksonville</i>
MRS. R. L. CLINE, ORGANIZATION.....	<i>Lakeland</i>
MRS. JOHN H. OWENS, BULLETIN.....	<i>Jacksonville</i>

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, NORTH CENTRAL "B".....	<i>Gainesville</i>
MRS. E. W. VEAL, NORTHEAST "C".....	<i>Jacksonville</i>
MRS. J. C. GRIFFIN, SOUTHWEST "D".....	<i>Tampa</i>
MRS. W. C. PAGE, SOUTH CENTRAL "E".....	<i>Cocoa</i>
MRS. HILLARD WILLIS, SOUTHEAST "F".....	<i>Coral Gables</i>

A REPORT FROM MRS. INGRAM

Dear Co-Workers:

After spending three months out on the west coast this past summer, Dr. Ingram and I returned too late for the first district meeting which was held in Tallahassee on October 2. I am sorry to have missed this meeting as I understand that the ladies assembled for the purpose of organizing. We are anxious to have an auxiliary in District A and hope it can be organized next year.

The November Journal contained information regarding the meetings in Districts B and C, held at Gainesville and St. Augustine, respectively.

BARTOW DISTRICT MEETING

The meeting of the Southwest Medical District Auxiliary was held in Bartow, October 31. About 20 ladies were present at the business meeting which was held in the Civic Center. Mrs. W. J. Barge, State Auxiliary president; Dr. Walter C. Jones, State Association president, and Dr. Gilbert S. Osincup, president-elect, attended and gave inspiring talks. They really made us feel we should go forward in this worthy work.

Four new members-at-large were added to the roll, giving them affiliation with the state and national organizations and helping our scholarship fund. Mrs. C. Griffin of Tampa and Mrs. H. G. Nix of Tampa were re-elected chairman and secretary-treasurer, respectively, for the coming year.

Mrs. L. L. Lancaster, general chairman, and her associates entertained the visitors with a tour and a delightful party in the attractive Civic Center. Bridge and games were enjoyed and several lovely prizes were awarded the winners. Later the ladies joined their husbands at dinner.

ORLANDO DISTRICT MEETING

The meeting of the South Central District Medical Auxiliary was held in Orlando on November 1. Mrs. Walter Page of Cocoa, chairman, was not present so your General District Chairman took charge of the meeting. Mrs. W. J. Barge, state Auxiliary president, and her daughter were guests at the meeting. Mrs. Barge is to be commended on her interest in this work.

A tour was taken in the early afternoon to Mead's Botanical Garden, where several lovely orchids were in bloom, one of which measured nearly 8 inches across. According to Professor Grover, this particular plant had been removed from the tropical jungles of South America just two weeks previous to the bloom. On the return trip, tea was served at the home of Mrs. Gilbert Osincup on beautiful Lake Sue. Mrs. J. S. McEwan poured and Mrs. Carl Hoffmann, Mrs. V. Frankfurth and Mrs. Charles Collins assisted the hostess in caring for the guests.

In the evening a banquet attended by the doctors and their wives was held in the Orange Court Hotel, following a social cocktail hour.

These district auxiliary meetings can be helpful if the ladies will attend. At district meetings of the garden clubs and at sectional meetings of women's clubs and other organizations, wonderful things are achieved. We can do the same at these district meetings if you will only attend and help. If all county auxiliaries would appoint or elect delegates to attend these meetings and if several state officers and committee chairmen would attend and discuss the different phases of the work, I believe interest would be stimulated and attendance increased. The members of the Southwest District Auxiliary are planning a definite program with a panel discussion for their next year's meeting. Women who join pay \$1.00 dues and become members at large. Thereby they help the scholarship fund and become affiliated with the state and national organizations.

Dr. Walter Jones, president of the State Medical Association, suggested that we collect data

KOROMEX DIAPHRAGM



**KOROMEX
TRIP-RELEASE INTRODUCER**

**TIP TURNS
ON SWIVEL**

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

on the lives of some of our beloved deceased doctors so that a record might be compiled of our pioneer doctors. These data should be sent to the chairman of archives who will forward them to the Medical Association. The Gainesville Auxiliary adopted this work as its project one year. The medical organization in that county is, I believe, one of the oldest in the state.

Our slogan is "Every Doctor's Wife in Health Defense", so join up somewhere and help.

Sincerely,

CAROLYN F. INGRAM (Mrs. L. C.)

General Chairman of Districts.

INDEX TO ADVERTISEMENTS

THIS ISSUE

Allen's Invalid Home.....	260
American Optical Co.....	260
Attwood, J. K., Pharmacist.....	304
Brawner's Sanitarium	256
Camel Cigarettes	262, 263
Combs Funeral Homes (Ambulance).....	305
Convention Press	304
Cook County Grad. Sch. of Medicine	258
Davis, R. B. Co. (Cocomalt).....	255
Ferguson Funeral Home (Ambulance).....	305
Florida Medical Directory	256
Hand, Carey (Ambulance).....	305
Holland-Rantos, Inc.....	303
Hoye's Sanitarium	258
Hygeia	256
Kyle, S. A.....	258
Lilly and Company, Eli.....	264
Mead Johnson & Co.....	308
Medical Writing Service.....	301
Miami Retreat, Inc.....	258
Miami Surgical Co.....	258
Natl. Tuberculosis Assn.....	305
Palm Beach Biltmore Hotel.....	261
Parke, Davis & Co.....	257
Petrogalar Laboratories, Inc.....	254
Physicians Casualty Assn.....	256
S. M. A. Corporation.....	299
Southeastern Optical Co., The.....	305
Sun-Ray Park Health Resort	260
Surgical Supply Co.....	301
Tucker Sanatorium, Inc.....	306
Upjohn Co., The.....	259
Wyeth & Bro., John	301

convention press

two eighteen west church street
jacksonville, florida



*printers
publishers*

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

PATRONIZE JOURNAL ADVERTISERS

OUR ADVERTISERS BEAR THE STAMP OF APPROVAL OF THE AMERICAN MEDICAL ASSOCIATION AND ALSO OF THE FLORIDA MEDICAL ASSOCIATION. THEY ARE WORTHY OF THE PATRONAGE OF OUR MEMBERS.

Pledge for 1942

THIS month, as we see the last page of the old calendar about to come down, to be replaced by a new one we pause to express gratitude on the one hand, hope on the other. Gratitude that we have been privileged, through the patronage of our friends, to share with them responsibility for the preservation and care of health and vision—hope that the new year will find us able to serve in this great work with even greater efficiency.



SOUTHEASTERN OPTICAL COMPANY
distributors of **BAUSCH & LOMB** products

Will you save
a life?

NOT many of us can be spectacular heroes. Yet by buying Christmas Seals you save human life just as surely as if you had plunged into a burning building!

More people between the ages of 15 and 45 die from tuberculosis than from any other one disease. By using Christmas Seals you make possible a year-round campaign against this pestilence—a campaign that since 1907 has reduced the tuberculosis death rate 75%!

Help save more lives in 1942!



Buy
**CHRISTMAS
SEALS**



Ambulance Directory

CAREY HAND

32-36 Pine Street
ORLANDO, FLORIDA
Telephone 4181

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive
WEST PALM BEACH, FLA.

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison) RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Walter C. Jones, Miami.....	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest	William C. Roberts, Panama City.....	Stewart Thompson, Jacksonville.....	Panama City, 1942
B—North Central	Alva T. Cobb, Gainesville.....	“ “ “	Ocala, 1942
C—Northeast	Maximilian Stern, Daytona Beach.....	“ “ “	Jacksonville, 1942
D—Southwest	Howard V. Weems, Sebring.....	“ “ “	Sarasota, 1942
E—South Central	Carl D. Hoffmann, Orlando.....	“ “ “	Cocoa, 1942
F—Southeast	Robert L. Elliston, Ft. Lauderdale.....	“ “ “	Miami, 1942
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta	E. D. Shanks, Atlanta	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami	Palm Beach, Apr. 12-13, 1942
State Dental Society.....	I. W. Shields, Miami	W. P. Wood, Jr., Tampa	Hollywood, Dec. 8-10, 1941
Soc. of Derm. and Syph.....	Wiley M. Sams, Miami	Lauren M. Sompayrac, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association.....	J. S. Stewart, Miami.....	J. Ralston Wells, Daytona Beach.....	Daytona Beach, Dec. 4-5, 1941
State Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	
Assn. of Industrial Surgeons.....	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman	
Soc. of Ophthal. & Otol.....	S. B. Forbes, Tampa	C. E. Dunaway, Miami	Palm Beach, Apr. 12-13, 1942
State Nurses Association.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine.....	Orlando, November, 1942
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	E. M. L'Engle, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables.....	G. N. Leonard, Miami Beach	
State Pharmaceutical Association.....	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association.....	L. J. Graves, Tallahassee.....	E. M. L'Engle, Jacksonville.....	Orlando, December 4-6, 1941
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association.....	Leland F. Carlton, Tampa.....	W. C. Page, Cocoa	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis	Fall, 1941
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Gulf Coast Clinical Society.....	G. G. Oswalt, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
S.E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami	Memphis, May, 1942
Southeastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association.....	Paul H. Ringer, Asheville.....	Mr. C. P. Loran, Birmingham.....	Richmond, November, 1942
Suwannee River Medical Society.....	E. C. Crouch, Jasper.....	T. H. Bates, Lake City.....	Lake City, December, 1941

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	W. C. Roberts, M. D. Panama City		12	10	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	W. P. Hixon, M.D. 24 W. Chase St. Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	49	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7	100%	A-2-'43 C. D. Whitaker, M.D. Marianna
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		7	6	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Thursday	5	4	
	Jackson *Calhoun	M. Q. Burns, M.D. Blountstown	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	100%	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	Sterling E. Wilhoit, M.D. Quincy	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	41	34	B-3-'43 J. M. Price, M.D. Live Oak
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	12	11	
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		7	100%	
	Taylor *Dixie, Lafayette	Ralph J. Greene, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	7	5	B-4-'42 Alva T. Cobb, M.D. Gainesville
B	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	J. Maxey Dell, Jr., M.D. 333 W. Main St., S. Gainesville	2nd Wednesday 7:30 P. M.	31	26	
	Marion *Levy	Eugene G. Peek, M.D. Commercial Bk. & Tr. Bldg., Ocala	Harry F. Watt, M.D. Box 146 Ocala	3rd Thursday 12:30 P. M.	27	22	
	Pasco-Hernando- Citrus	William B. Moon, M.D. Crystal River	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	100%	
	Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P. M.	184	183	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
C	St. Johns	A. C. Walkup, M.D. East Coast Hospital St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11	100%	C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganiou, M.D. Palatka	2nd Tuesday in Feb., Apr., June, Aug., Oct., Dec. 7:00 P. M.	11	10	
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	43	42	D-7-'43 John R. Boling, M.D. Tampa
	Hillsborough	B. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	107	96	
D	Manatee	W. E. Wentzel, M.D. Box 245, Bradenton	Wm. D. Sugg, M.D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	D-8-'42 H. V. Weems, M.D. Sebring
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	102	100%	
	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	18	16	
	DeSoto-Hardee- Highlands-Char- lotte-Glades	A. T. Eide, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	20	19	
	Lee *Collier, Hendry	M. F. Johnson, M.D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Friday 7:30 P. M.	17	100%	E-9-'42 Carl D. Hoffmann, M.D. Orlando
	Polk	Bruce R. Tinkler, M.D. Lake Wales	S. Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	63	61	
	Brevard	T. C. Kenaston, M.D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	100%	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bk. Bldg. Leesburg	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	20	17	
	Orange *Osceola	Frank D. Gray, M.D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	88	82	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	13	12	
E	St. Lucie-Okeech- hee-Indian River- Martin	Joseph B. Kollar, M.D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	100%	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	41	38	
	Palm Beach	Wilbur O. Arnold, M.D. Box 1785 W. Palm Beach	William E. Bippus, M.D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	64	
	Dade	C. Larimore Perry, M.D. 525 N. E. 15th St. Miami	Herbert Eichert, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	349	306	
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

*Supervise and aid until organized separately.

*a natural
source
of*

VITAMIN B₁
VITAMIN G



and other known factors of the
VITAMIN B COMPLEX
including nicotinic acid

MEAD'S BREWERS YEAST TABLETS • Each Mead's Brewers Yeast Tablet contains 20 International units of vitamin B₁ (thiamin—the antineuritic factor) and 20 Sherman units of vitamin G (riboflavin). Clinical tests have shown the product to be rich also in nicotinic acid, for the prevention and treatment of pellagra. Supplied in 6-grain tablets in bottles of 250 and 1,000.

MEAD'S BREWERS YEAST POWDER • Each gram ($\frac{1}{2}$ teaspoon) supplies 50 International units of vitamin B₁ and 50 Sherman units of vitamin G (the same potency as Mead's Brewers Yeast Tablets), as well as nicotinic acid. Mixes readily with various vehicles the physician may specify in infant feeding. Supplied in 6-oz. bottles.

*Mead's Brewers Yeast is nonviable and is vacuum-packed to prevent oxidation.
Packed in brown bottles and sealed cartons for greater protection.*

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U. S. A.

NEW YORK ACADEMY OF 2

MEDICINE

2 E 103RD ST

NEW YORK N. Y.

The JOURNAL of the Florida Medical Association, Inc.

Vol. XXVIII

JANUARY, 1942

No. 7

THE N.Y. ACADEMY
OF MEDICINE
JAN 26 1942
LIBRARY

CONTENTS

The Use of Vitamins in Surgery, J. R. Chappell, M. D., Thomas Butt, M. D., and Sanford L. Zieve, M. D. Orlando	323
Modern Methods of Immunization, Thomas M. Palmer, M.D., Jacksonville	330
A Year's "Eye" Service at the Florida State Hospital in Retrospect, F. V. Gammage, M. D., Chattahoochee	333
A Plea for the Conservative Treatment of the Inevitable and Incomplete Abortion, William Carmel Roberts, M. D., Panama City	338
Editorials: Journal Changes; Prevention of Blindness; A Call to the Medical Profession; A.M.A. Broadcasts	346
Violations of Medical Practice Act	346
Annual Registration	348
Births, Marriages and Deaths	348
State News Items	348
Component County Societies	350
Advertisers' Notes	354
Woman's Auxiliary	356
State and Sectional Meetings	357
Component Societies by Districts	358






• The strictly regulated program of the Army helps to harden the soft, lackadaisical rookie. But what about the men who remain in civilian life?

When the deleterious effect of a soft civilian life—irregular habits, lack of exercise, faulty diet—leads to constipation, the use of Petrogalar[®] is frequently indicated.

Petrogalar adds bland, unabsorbable moisture to the stool to induce a soft, easily passed mass.

Consider its use for the treatment of constipation. Petrogalar is pleasant to take and economical to use.

FOR THE TREATMENT OF CONSTIPATION

Petrogalar



*Trade Mark. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 6.5 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.



Petrogalar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois



**The New, Dry
Micro Test for Urine Sugar**

Galatest

One drop of urine on a little Galatest powder gives an immediate positive or negative reaction. No test tubes or bunsen burner required.

Color chart and full particulars on request

THE DENVER CHEMICAL MFG. CO., 163 VARICK ST., NEW YORK

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla. Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

Surgical Supply Company

"Florida's Surgical Supply House"

HENRY L. PARRAMORE

Pres. and Gen. Mgr.

T. EMMETT ANDERSON

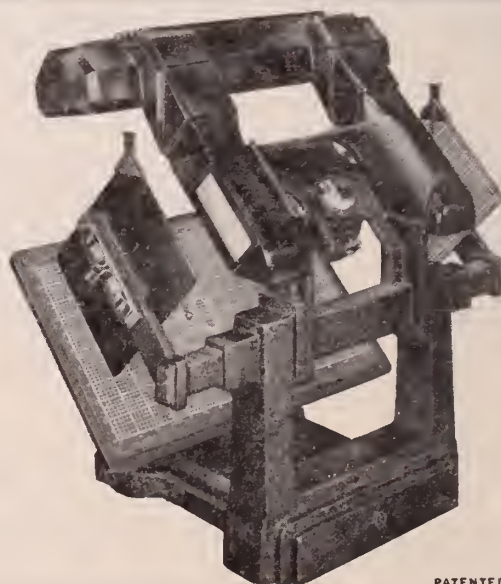
Vice-President

YOUR PATRONAGE GREATLY
APPRECIATED

For CENTRAL VISUAL FIELD STUDY

The STEREO CAMPIMETER

Recent important advances in visual field work have necessitated careful refinement in instrumentation. Angioscotometry, for example, imposes severe specifications upon instrument design. This study, however, can be carried out under ideal conditions with the AO Lloyd Stereo Campimeter. This instrument, in addition, permits full study of the important nasal fields. Optimum testing conditions are provided through equalized and adjustable illumination of the test field. Stereopsis is utilized to induce closer attention and steadier fixation. Ask your American Optical representative for further information.



PATENTED

AMERICAN OPTICAL COMPANY



IPRAL A safe, effective sedative usually inducing 6 to 8 hours sleep closely resembling the normal from which the patient awakens generally calm and refreshed. Over 15 years of use has shown it to be markedly free from untoward effects in the usual therapeutic dosage.

HOW SUPPLIED

IPRAL CALCIUM (calcium ethylisopropylbarbiturate). 2-grain tablets and powder form for use as a sedative and hypnotic. $\frac{3}{4}$ -grain tablets for mild sedative effect throughout the day.

IPRAL SODIUM (sodium ethylisopropylbarbiturate). 4-grain tablets for pre-anesthetic medication.

*For literature address the Professional Service Department,
E. R. Squibb & Sons, 745 Fifth Avenue, New York, N. Y.*

E • R • SQUIBB & SONS, NEW YORK



One Skill that Can Do Most to Spread Your Name ... and Fame

SMART practitioners know that earning a reputation for being "good on bifocals" is the most important step to acquiring a reputation—and a practice. For bifocal patients are the mature—and influential—people in your community. Vital in any

bifocal technique is a knowledge of the advantages of Panoptik and other Bausch & Lomb modern bifocals. Let us tell you our bifocal story.

SOUTHEASTERN OPTICAL COMPANY distributors of BAUSCH & LOMB products



Brawner's Sanitarium SMYRNA, GEORGIA (Suburb of Atlanta)

For Nervous and Mental Disorders, Drug and Alcohol Addictions.
Approved diagnostic & therapeutic methods.
Hydrotherapy, Electrotherapy, Massage, X-Ray and Laboratory.
Special Department for General Invalids and Senile cases at Monthly Rates.

JAMES N. BRAWNER, M.D., *Medical Supt.*
ALBERT F. BRAWNER, M.D., *Resident Supt.*

86c out of each \$1.00 gross income used
for members' benefit

PHYSICIANS CASUALTY ASSOCIATION PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

39 years under same management

\$2,000,000 INVESTED ASSETS
\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to
400 First National Bank Building

OMAHA, NEBRASKA

A New Study

COCOMALT AS SUPPLEMENTARY NOURISHMENT IN TUBERCULOSIS



Clinical Material

Controlled observations* of 118 cases of pulmonary tuberculosis over a period of 12 to 20 weeks.

Controls

COCOMALT tested against milk alone or cocoa flavored milk for supplementary nourishment.

Results

	WEIGHT INCREASE	HEMOGLOBIN INCREASE
COCOMALT Test Group . . .	50%	48%
Control Group . . .	21%	27%

Note that the percentage of patients gaining weight in the test group was more than twice that in the controls.

8-10 WEEKS AFTER THE STUDY WAS CONCLUDED, additional checks were made on several patients. Results—none of the COCOMALT test group showed any significant gain in weight following

discontinuation of the enriched food drink.

More and more physicians are realizing the value of COCOMALT for "defense" diets in certain disease states. COCOMALT contains vitamins A, B₁ and D . . . minerals—calcium, phosphorus and iron. A delicious food drink that even the most difficult appetite will seldom refuse.

COCOMALT
Enriched Food Drink

R. B. DAVIS COMPANY, Hoboken, N. J. Dept. No. FM-1

Please send me a reprint of the new COCOMALT study.

Name _____

Street and No. _____

City _____ State _____

*Matsuzawa, D; Boyd, L. J.
New York Medical College and
Flower Hospital Bulletin—Dec. 1941.

Smokers Can't Help Inhaling—but

they can help their throats!

ALL those who smoke inhale — at least sometimes. And *when* they inhale, the danger of irritation increases. Therefore, the importance of this Philip Morris advantage:

The irritant quality in the smoke of four other leading brands was shown in recognized laboratory tests* to average more than three times that of the strikingly contrasted Philip Morris.

Further—the irritant effect of such cigarettes was observed to last more than 5 times as long!

A change to Philip Morris cigarettes will minimize irritation due to smoking.

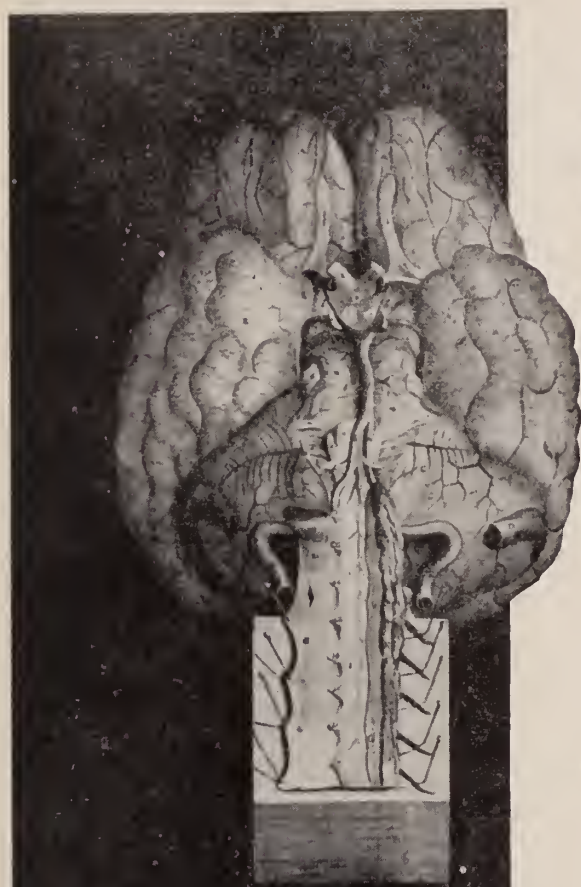
PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.

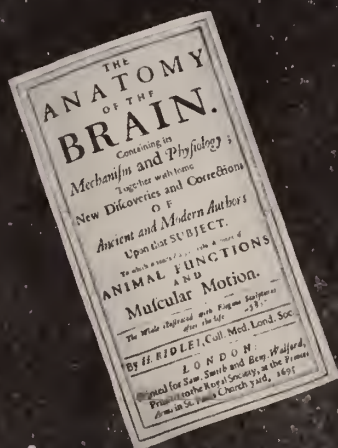
119 FIFTH AVE., NEW YORK



**Facts from: Proc. Soc. Exp. Biol. & Med., 1934, 32, 241-245; N. Y. State Jrl. of Med. Vol. 35, No. 11,590; Arch. of Otolaryngology, Mar. 1936, Vol. 23, No. 3,306.*



From the "elegant sculptures after the life" which are found in that classic anatomical volume of 1695, credited to H. Ridley—"The Anatomy of the Brain."



Storm Center

...THE BRAIN

When electroencephalography records the brain potential of epileptic patients prior to and after the use of Kapseals Dilantin Sodium, the oscillograph usually depicts more normal brain waves. Furthermore, seizures diminish in frequency and severity. As a result of this, the patient's general attitude and behavior are favorably influenced and he is permitted to enjoy a more normal life.

A combined report of thirteen clinicians states that in 404 out of 595 epileptic patients, Dilantin Sodium was more effective than other anti-convulsants¹. Its value in patients not responding to other medication has been reported². All in all, Dilantin Sodium (phenytoin sodium), a product of long and systematic research in clinic and laboratory, marks a definite forward step in the management of epilepsy. Complete details upon request.

1. Council Report: J.A.M.A., 113: 1734, 1939

2. Merritt, H. H. & Putnam, T. J.: A. J. Psychiat., 96: 1023, 1940

KAPSEALS DILANTIN SODIUM

A product of modern research offered to the medical profession by

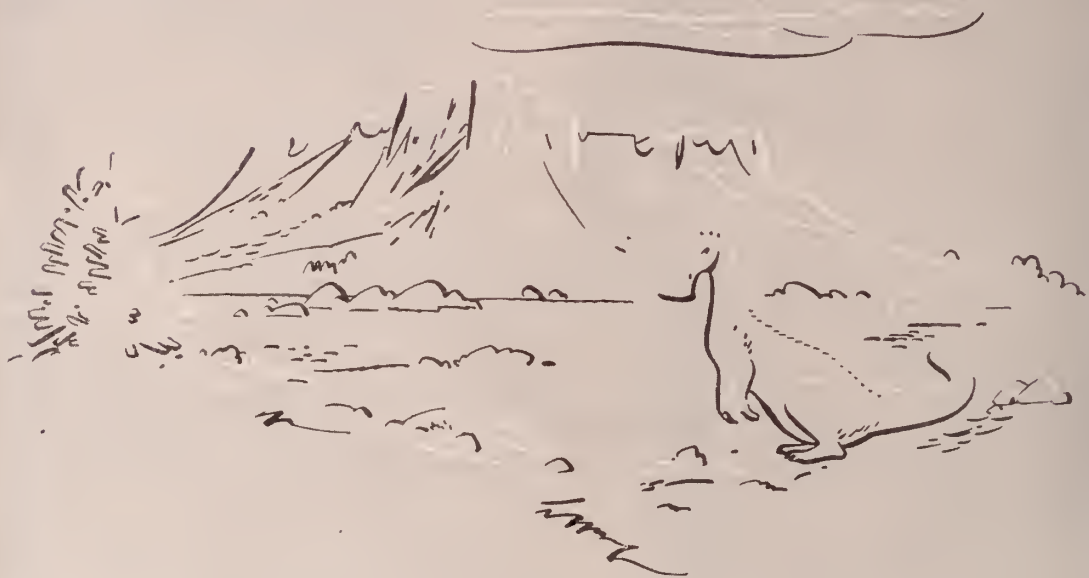
PARKE, DAVIS & COMPANY
Detroit, Michigan

Over 75 Years of Service



to Medicine and Pharmacy

Vitamins were there all the time!



Vitamins have performed their vital functions for untold ages—but modern science has accomplished something new. It has revealed specific functions of vitamins, isolated many of them, and taught us how to make some of them synthetically. As a result, we can now make from the pure vitamins pharmaceutical prepa-

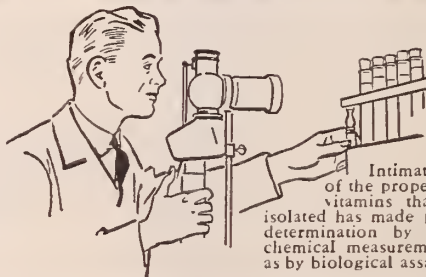
rations of great potency appropriate for the treatment of each of the various clinical syndromes caused by lack of one or more of these essential food factors.

Fifty-five years of experience in making fine pharmaceuticals equip The Upjohn Company to prepare these vitamin products for you.

NICOTINIC ACID
(UPJOHN)

ASCORBIC ACID
(UPJOHN)

THIAMINE HYDROCHLORIDE
(UPJOHN)



Intimate knowledge of the properties of those vitamins that have been isolated has made possible their determination by physical and chemical measurements, as well as by biological assay.

Upjohn
KALAMAZOO, MICHIGAN



Fine Pharmaceuticals Since 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE SLOWER-BURNING CIGARETTE MEANS LESS NICOTINE IN THE SMOKE!

MOST physicians concede that the leading constituent of cigarette smoke from a physiologic standpoint is *nicotine*.

Medical—research authorities* find that the slower-burning cigarette produces less nicotine in the smoke. Camel's scientific tests** show that Camels burn slower and that the smoke of Camels contains less nicotine than the average of the other brands tested.

When suggesting a program to improve a patient's smoking hygiene, you may find it of value to recommend Camel, the slower-burning cigarette.

Camel offers a double advantage: Besides the reduction of nicotine intake (and all that this implies in the lessening of physiologic irritation), Camel gives more assurance of your patients' cooperation. Camel's slower-burning, costlier tobaccos maintain *the essential "pleasure factor" in smoking*.

**J.A.M.A.*, 93:1110, October 12, 1929

Bruckner, Die Biochemie des Tabaks, 1936

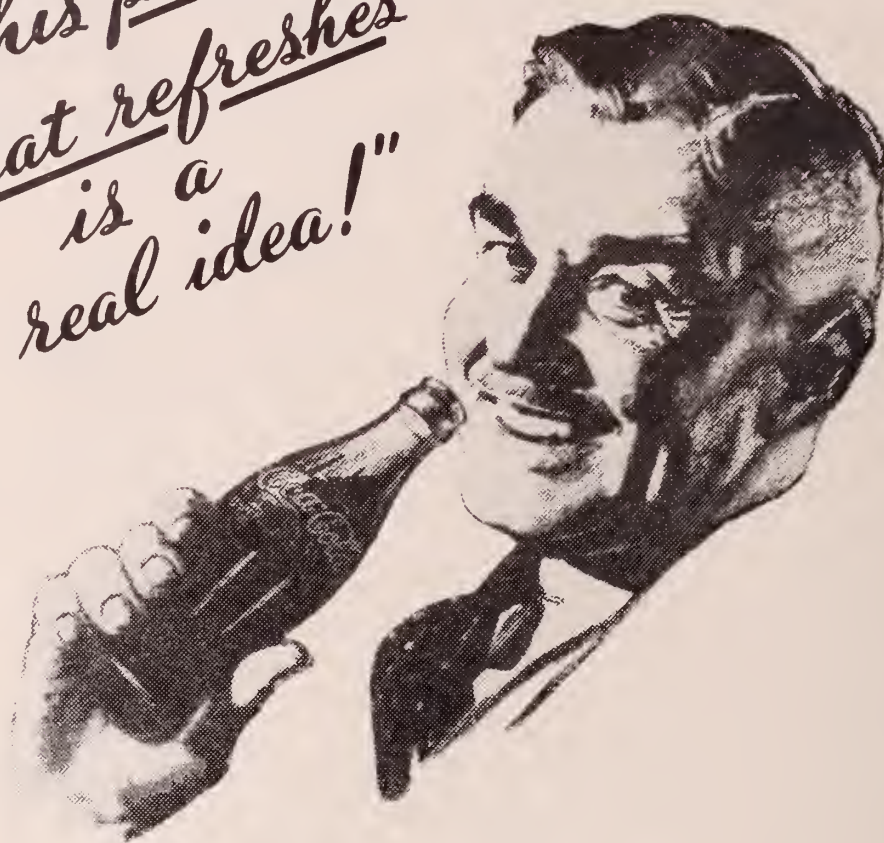
***The Military Surgeon*, Vol. 89, No. 1, p. 7, July, 1941

A RECENT ARTICLE by a well-known physician in a national medical journal presents new and important information on the subject of cigarette smoke and the burning rate of cigarettes. A comprehensive bibliography is included. Let us send you a reprint of this article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

CAMEL

THE CIGARETTE OF COSTLIER TOBACCOS

*"This pause
that refreshes
is a
real idea!"*



Ice-cold Coca-Cola, — pure, wholesome and delicious, — has made *the pause that refreshes* America's favorite moment. Everybody welcomes the refreshed feeling,— the happy after-sense of complete refreshment Coca-Cola always brings.

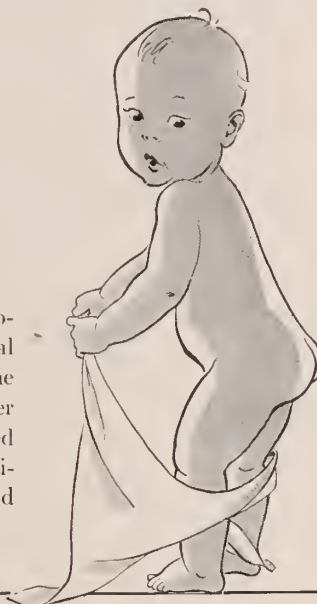


THE PAUSE THAT REFRESHES

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

No Lack in Biolac!

WITH THE sole exception of vitamin C, Biolac provides completely for the formula needs of normal infants throughout the entire bottle period. From the time when infants consume a full quart of formula per day, here's how certain essential food factors supplied by Biolac feedings compare with the minimal nutritional requirements recognized by the U. S. Food and Drug Administration.



	MINIMAL REQUIREMENTS	BIOLAC FEEDINGS
PROTEIN (gms./lb. body weight) . . .	1.4 to 1.8*	2.2†
CALCIUM (gms./day)	1.0*	1.0
IRON (mgms./100 calories)	0.75	1.25
VITAMIN A (U.S.P. Units/day)	1500.	2500.
VITAMIN B ₁ (U.S.P. Units/day)	83.	85.
VITAMIN B ₂ (mgms./day)	0.5	2.
VITAMIN D (U.S.P. Units/100 calories)	50.	63.

*The Food & Drug Administration has not promulgated minimum requirements for protein and calcium in infancy. The values shown are those recommended by the National Nutrition Conference.

†When Biolac formulas are fed in the amount of 2½ fl. oz./lb. body weight.

Biolac is prepared from whole milk, skim milk, lactose, vitamin B₁, concentrate of vitamins A and D from cod liver oil, and ferric citrate. Evaporated, homogenized, sterilized.



Borden's BIOLAC

A BORDEN PRESCRIPTION PRODUCT



A New Year — An Old Code

JANUARY — beginning of a year which promises strenuous times. With an organization trained in the art of doing things well, Eli Lilly and Company will maintain its high standards, will not deviate from the policy of close co-operation with the medical profession, and will constantly strive for — Progress Through Research.

Lilly

ELI LILLY AND COMPANY

INDIANAPOLIS, INDIANA, U. S. A.



THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, January, 1942

Number 7

THE USE OF VITAMINS IN SURGERY

J. R. CHAPPELL, M.D.

THOMAS BUTT, M.D.

AND

SANFORD L. ZIEVE, M.D.

ORLANDO

In the last few years there have been many valuable additions to the widening scope of medical science, and no phase has made more distinct advances than the rapidly expanding knowledge concerning the vitamins. The countless years of ceaseless and diligent work have steadily produced remarkable disclosures, both clinically and in the laboratory, as to the nature and use of these essentials for the proper maintenance and function of the human organism. Forward goes the experimentation and application, with unending contributions concerning these vitamins; not only is there extraordinary progress in isolation, synthesis, and therapeutics, but the constant revelations add new elements to the already rapidly growing known group. With the results, reports and uses constantly before physicians no matter where they turn, particularly in the field of internal medicine with its prevention and treatment, it is natural to turn to another field, that of surgery, which is not isolated of course, to see where the vitamins may be most usefully employed. Of all the phases, this is the infant in the family of problems and possibilities pertaining to vitamins, and in consequence only limited information and probabilities have been proposed. Yet it is of interest to see where these accessory essentials have been and may be put to advantageous use generally in the realm of surgery.

For some time now it has been believed by many practitioners that patients requiring surgery are generally deficient in certain bodily requirements, and recently it has become apparent to an increasing number of internists and surgeons that in a large percentage of these cases the patients have vitamin deficiencies ranging from a mild to an extreme degree.¹ Several investigators have undertaken to delve into this problem. The results of their studies indicate that particularly amongst indigent patients, the main body of

whom appears in free clinics, vitamin deficiencies in those needing surgery are present to some degree in a large proportion of cases.¹

These states vary in severity and embrace nearly all the major vitamins to some extent. Vitamin C is as deficient as any, with many patients in the prescurvy or scorbutic level,² as evidenced by blood determination of ascorbic acid, without as yet showing signs clinically of the condition threatening or almost actually present.^{1,2,3} In addition, in nearly all patients needing surgery, in whom the main pathologic changes are in or affect the gastrointestinal tract in some manner,² there is convincing evidence of these nutritional deficiencies being present, as they may obviously result from interference with intake, absorption, assimilation and utilization.⁴

Recognizing the actual presence of a general vitamin deficiency in patients needing surgery, or realizing that the possibility of a low vitamin level exists, many surgeons feel that before being operated upon, these patients require a liberal preoperative preparation devoted heavily to an adequate intake of vitamins.¹ They consequently are given a diet with ample vitamin content or one to which is added the isolated vitamins A, B, C and D for a period of from ten to fourteen days prior to operation.¹ Also during the immediate postoperative period when the diet is necessarily restricted for some two weeks, a generous supply of vitamins is furnished the patient.¹ Some surgeons strongly feel that this routine builds up the patients, makes them better operative risks and hastens recovery.¹ As yet, however, with absolute proof still lacking, but the probability being almost generally recognized, most surgeons are carefully watching and waiting. Certainly the proposition is sound, and as such, with investigations continuing, the answer may soon be forthcoming. Where the individual vitamins have proved useful, or have the possibility of advantage in surgery is of particular interest.

VITAMIN A

Vitamin A⁵ has been assigned no definite place as an aid in the surgical field, and so far only a few possible uses for it have been proposed. Amongst those who feel that the anti-infective property,¹ long ago attributed to it, is a fact, the

Read before the Sixty-Eighth Annual Meeting of the Florida Medical Association, held in Jacksonville, April 28, 29 and 30, 1941.

possibility that it may aid in reducing postoperative infection looms on the horizon, but as the original attribute is a dubious one, its application to surgery can be no more than a hypothesis. A more interesting possibility is suggested by those who feel that a build-up with a generous supply of vitamin A before and after surgery may help in preventing infections by preventing the metaplasia and keratinization of epithelial surfaces that occur in vitamin A deficiency; these tissues thus remain more nearly intact and less liable to bacterial invasion of the broken surface with subsequent infection.¹ This preventive measure is applicable to all epithelial surfaces, such as those of the genitourinary tract and the salivary glands, and especially so, some say, to those surfaces along the respiratory tract.¹ It still remains a possibility.

VITAMIN B COMPLEX

As the great vitamin B complex is slowly unravelled into its various component parts, each as an entity of importance in itself, its individual factors fill innumerable places of essential use and application, and as such many are of definite aid in the surgical field. This aid, while of proved value in only few instances, gives promise of having considerable worth as time passes and more tests of application are given chances of confirmation, based on those uses already known for the vitamin B complex in the preventive and therapeutic field. For many years several diseases of the nervous system, particularly of the peripheral type such as polyneuritis and beriberi and also the peripheral lesions associated with pellagra, have been proved to be caused by vitamin B deficiency, or definitely shown to improve under its therapy; and as the vitamin B complex has been separated into individual members, it has been established that particularly vitamin B₁ or thiamin chloride is the preventive factor of aid in the treatment of these peripheral lesions of the nerves.⁶ With this discovery as a basis, it has been thought that a place of use may be found for it in peripheral neurosurgery, as an aid in healing and recovery, and although confirmatory reports are still to be had, it remains as a possibility for further study.

In addition, since thiamin chloride is of definite help in abating certain complaints of the digestive tract such as anorexia, nausea and vomiting, and since it is of definite aid in pre-

venting and treating these symptoms when they follow roentgen therapy as well,⁷ vitamin B₁ preparations have begun to be used in hopeful attempts to combat these conditions when they occur so often and decidedly postoperatively. This form of therapy may yet prove to be of value, but its worth being still unconfirmed to any appreciable extent, it awaits further trial. Nevertheless, some surgeons have adopted the practice of routinely giving thiamin chloride, particularly when the gastrointestinal tract is handled or disturbed in any way.

In those diseases which require additional vitamin B as a result of the pathologic process present, and in which the ultimate form of treatment is surgical, the necessity of supplying adequate and increased amounts of thiamin chloride both in the preoperative preparation and in the postoperative regimen is being definitely recognized. Hyperthyroidism certainly falls in this category,¹ and other conditions may soon be added to this group. In the preoperative preparation it has also been demonstrated that there is an increased necessity for vitamins A, C and D, as well, particularly A, which has been demonstrated to be an antagonist of thyroxine and possibly also inhibits the function of the thyrotropic hypophysis hormone. This antagonism is in some degree attributed to vitamins C and D also.^{6,8}

As pellagra became a disease of known cause, with its intestinal lesions also shown to respond to vitamin B therapy in the factor of nicotinic acid primarily, so it came to be almost proved as to how this essential of the vitamin B complex affected the gastrointestinal tract. Continually, reports appeared which showed that it was essential for the maintenance of normal motility of the digestive tract.¹ With this knowledge as a lead, some surgeons began to use nicotinic acid either alone or in combination with thiamin chloride, further to promote proper intestinal function postoperatively, in the hope of additional help to reduce nausea and vomiting and also the great distress of intestinal distention and its results. At present it can be said that belief in this treatment has been gradually growing, and its application in this manner will soon be established, either alone or usually as a part of the entire vitamin B complex, as a routine form of preventive therapy in surgery.

VITAMIN C

Of all the group of the basic vitamins which have been known to medicine for many years, probably no other single one has had an earlier relationship or a greater attempt made to find an exact place for it in application to surgery than vitamin C. In the original descriptions of scurvy it was noted that in this condition owing to a lack of this vitamin, many previously healed wounds and scars, old and new, would lose their integrity and strength and would by separation of the margins of the wound become open and at times completely disrupt.³ Later, not as strikingly as they had broken down, some of these wounds would begin to heal again when the basic deficiency was recognized and put under the proper course of treatment. Progress, however, went no further for many years, and it was left as a fact that in some way vitamin C played an important part in the healing of wounds and in keeping them strong thereafter. As the recent rapid advances in knowledge of the vitamins progressed and the ascorbic acid nature of vitamin C was disclosed, the problem of this vitamin and wound healing again had an impetus with the result that many investigators have attacked this problem for years with slow but gratifying results.

Today it is widely believed that vitamin C is necessary for proper wound healing.^{1,3,9,10,11} Although the exact relationship and mode of action that it has in this process are still not completely solved, it appears that it has to do with the formation of the supporting structures and framework, the intercellular cement substance, the laying down of collagen, and the maturation of fibroblasts.^{1,2,3,9,10,11,12,13} Numerous reports have shown that in many patients subjected to surgery varying degrees of lowered vitamin C level in the blood and body occur^{1,3} and also that in the immediate postoperative period the blood ascorbic acid drops considerably.¹³ Furthermore, several clinics have recently reported series of cases to show that in patients with a lowered vitamin C level, wound healing is slower and not as strong as in those in whom the ascorbic acid is at a normal level,¹² or is brought to a normal level and kept there.^{9,13} It is also now established that vitamin C is not or cannot be stored in any appreciable amount,⁹ cannot be synthesized in the human body^{3,9,10,11} and is rapidly depleted,⁹ not only when the level in the blood is low to start with,

but also postoperatively in those cases with normal preoperative levels.^{13,15} Going further, but as yet unproved to any great extent, is the belief that in many cases delayed healing of wounds and disrupted wounds occur postoperatively because of a depletion of vitamin C in the body.^{9,12}

Taking all these findings for what they may show or have potentialities of proving, those that follow the vitamin C relationship to wound healing naturally believe that surgical patients must be given an adequate intake of vitamin C before and after operation.^{1,3,9,10,12} Amongst these some believe that the patient who is deficient in vitamin C should receive approximately one gram of cevitamic acid each day for a period of from one to two weeks before the surgical procedure is attempted and that the administration should continue until wound healing is complete.^{3,9} Even in patients without this deficiency a similar procedure may prove of equal value and is recommended as well.^{1,9}

The cevitamic acid level varies in certain diseases, the difference being in levels that are lowered, and patients with these diseases or conditions are believed to need a more liberal intake of vitamin C.^{1,3,9,13} Alkalies, syphilis, alcoholism, infection, gastrointestinal dysfunction and fevers lower the ascorbic acid content of the blood and the body,^{2,3,9} and in their presence more vitamin C is needed⁹ as more is being lost all the time.³

In giving vitamin C it has been noted that the saturation point is about 1.3 mg. per 100 cc. of blood,^{1,3,9} above which it is rapidly spilled in the urine.¹³ A level of from .5 mg. to this point is deemed necessary, and if less, it is considered that a definite deficiency is present.^{1,3,9,13} Moreover, in giving vitamin C it should be continued until healing is truly complete, for in cases of delayed wound healing and disrupted wounds with evisceration, the tissues are deficient in the vitally necessary collagenous material and intercellular cement substance that give the strength to all healed wounds and tissues.^{3,9}

VITAMIN D

The use of vitamin D as an adjunct to surgery is still greatly limited in the very problematic state in which it rests. The main point for debate or possible use still hinges on the old argument as to whether or not it is essential for speeding up and promoting adequate bone repair, following fractures and bone surgery. Over-

whelmingly the consensus still is that in persons without deficiency, whether of vitamin D, calcium or phosphorus, and on an adequate diet, bone repair is not influenced by additional amounts of the vitamin; in fact, massive doses may be detrimental, as they may bring about overabsorption, retardation of growth and repair, and degeneration.^{16,17} There are, however, some who still furnish extra vitamin D, calcium and phosphorus to patients who are to have or are undergoing bone repair. In rachitic persons in whom a definite deficiency exists, or in patients over 55 years of age in whom there are some demineralization and resorption in the bone with the total bone lessened and the trabeculae and cortices thinner, the addition of vitamin D and the essential elements has often proved of value in aiding bone repair, but even in a great portion of these cases most surgeons feel, with ample statistics on hand, that these accessories have no added value.^{16,17} Frankly, as yet, vitamin D has found no distinct place as an aid in surgery, as long as normal diets are furnished and maintained.

VITAMIN K

The discovery and increased understanding of vitamin K have served as a boon to surgery. No other vitamin as yet has had as direct a relationship or offered as substantial proof of providing essential aid to the surgical field. Not only has its usefulness been almost generally accepted, but there is practically unanimity of opinion amongst all investigators in regard to what is known and propounded about this vitamin. Vitamin K has been named the "coagulation vitamin" and "antihemorrhagic vitamin." It has been established that its presence is needed for maintaining the prothrombin level in the blood^{18,19,20} so that the normal process of blood coagulation from this factor will not be altered; and its absence, definitely proved in chicks^{19,20,21} and now being applied to human beings, has been shown to produce an abnormal tendency to bleeding.^{18,19,20,21,22}

Vitamin K is a fat-soluble substance^{18,19} normally present in the intestine primarily by the maintenance of an adequate diet,^{20,22,23} but it is also produced by certain bacterial action as that of the colon bacillus, *Staphylococcus aureus* and *Bacillus subtilis*.^{18,20,21,24} In the presence of bile of normal composition,^{1,20,22,23} particularly the bile salts,¹⁸ and with a normal absorptive sur-

face in the small intestine,^{1,19,20,23} this vitamin is absorbed and then utilized by a liver physiologically normal and capable of doing so, in the metabolism presumably for the synthesis of prothrombin.^{1,18,19,20,22,25,26} Any interference with this normal process of maintaining an adequate prothrombin level in the blood produces an abnormal potentiality and tendency to bleed, or actual bleeding, and in the presence of needed surgery it becomes a vital problem which must be remedied, or undertaken with precautionary preparations.^{10,22} Now with vitamin K, many of these potentialities, tendencies and hemorrhages occurring because of a decreased prothrombin level can be remedied or guarded against with proper therapy and attention to restoring the prothrombin level and maintaining it by supplying the missing or deficient factors.

When there is a deficiency of vitamin K in the intestines²¹ owing to an inadequate diet,^{20,22,23} such as occurs in pyloric obstruction, high intestinal obstruction (jejunum), general nutritional deficiency, intestinal fistula and prolonged duodenal suction,^{1,21,22} the furnishing of foods known to be rich in this vitamin, or concentrates of them, or synthetic products paralleling the activity of vitamin K, may be all that is needed to bring the prothrombin level close to or back to normal. Some investigators claim that ordinarily a true vitamin K deficiency in the intestines cannot exist because of the constant action of the bacteria present to form it.²¹ If there is inadequate bile present in the intestines, either in quality or quantity,^{18,20,21,22,23,25} as in obstructive jaundice,^{1,18,19,21,22,23,25} biliary and hepatic dysfunction, acute and severe hepatitis, biliary fistulas, prolonged duodenal drainage and high intestinal fistulas,^{1,18,21,22} so that the vitamin is not properly absorbed, then the administration of normal human bile or bile salts,^{25,27} alone or with the vitamin,^{21,25} will remedy the condition, or the vitamin may be given parenterally. If the absorptive surface of the small intestine is altered or diseased,^{19,20,22,23} as in short-circuiting surgical procedures, intestinal obstruction, diarrheal diseases, ulcerative colitis, sprue, celiac disease, dysentery and fistulas,^{1,19,20,22,23} so that in the presence of adequate vitamin K and normal bile or bile salts the vitamin cannot be absorbed properly,¹⁹ then it must be given parenterally until the intestinal surface regains adequate absorptive powers. Above all, the liver must be capable of

utilizing the vitamin^{20,21,22,23,25,26} to restore the blood prothrombin level, for in certain diseases of the liver with varying amounts of hepatic damage,^{18,10,23} as present in cirrhosis, hepatitis, common duct stones, chronic cholecystitis, chloroform anesthesia and intoxication, certain poisonings as by phosphorus and carbon tetrachloride, and acute yellow atrophy,^{18,19,20,21,22,23,24,25,28} the utilization of the vitamin varies with the degree of damage to the liver from partial utilization to none,^{18,10,21,28} regardless of how or where the vitamin is supplied. Certain diseases of the liver, however, not too far progressed, abate in varying degree, thus altering the utilization of vitamin K and formation of prothrombin.²⁸ Thus it is obvious how important vitamin K is in surgery.

In vitamin K therapy the amount to be used in any given case varies as this factor has not yet been definitely determined. The best index for treatment is the determination of the prothrombin level in the blood,¹ as arrived at by the Quick method,²⁰ or by other means.^{18,30} At present it is believed by most investigators that in giving vitamin K the oral method is the one of choice; or it may be given by duodenal tube, whether of necessity or not.^{20,23} Foods rich in the vitamin may be given orally, amongst which are certain green vegetables such as alfalfa (K₁), kale, hempseed, cabbage, spinach,^{1,18,20,21,22,24,28} and dried carrot tops, chestnut leaves and tomatoes;²⁰ it is also known to be present in putrified fish meal (K₂), hog liver fat and egg yolk.^{10,20,23,24}

Concentrates of foods with a high vitamin K content are also used,^{18,10,25} such as those of alfalfa meal, fish meal and spinach, the most prominent being a fat-soluble alfalfa concentrate, which may also be administered through a duodenal tube. In this latter method some physicians are advantageously using a water-soluble product,²¹ especially since the possibility of insufficient absorption of fat in the intestine in fatty disorders may occur. An alfalfa concentrate put up in gelatin capsules¹⁰ has been supplied daily in amounts varying from 200 mg. to 1200 mg. or more,^{10,22,27,31} and as bile salts are essential for intestinal absorption, they or human bile are usually also supplied daily in amounts ranging from 1 to 4 grams of the salts or one ounce of whole bile.^{1,18,10,22,27}

In addition, although vitamin K has been isolated and synthesized as 2-methyl-3-phytyl-1,4-naphthoquinone,³² several other synthetic vita-

min K substitutes have been presented and used more effectively.^{21,23,33} Of these, 2-methyl-1,4-naphthoquinone more nearly parallels the activity of vitamin K and produces better results when used in synthetic preparations.^{22,23,26,32,33} Its use is highly recommended by the intestinal route in doses of from 1 to 4 mg. with varying amounts of bile salts,³³ but it also can be given parenterally,^{10,21,22,26,28,31,32,34} though with not as conclusive results.

The intestinal method of supplying vitamin K or synthetic substitutes seems to bring about a rapid response in the elevation of the plasma prothrombin within a period ranging from six to twelve hours²² to at most one to two days and maintains it for a few days,³¹ but thus requires frequent periodic administration. Those who have given it parenterally are not in entire agreement as to the results, although on the whole the results appear to be proving satisfactory. Some authors observed that an emulsion of alfalfa concentrate or an alfalfa extract given intramuscularly requires from five to seven days longer to produce a satisfactory response,^{10,23} although it is then maintained over a longer period. Others claimed that the administration of from 2 to 4 mg. in corn oil intramuscularly results in responses in the prothrombin level as high as 48 per cent in eight hours and that the response may be maintained for a week.²⁶ Still others claimed that an emulsion in water given intramuscularly produces a quick but fleeting response as in enteral administration, but other investigators³¹ claimed that this response requires at least three days, and when it is given in oil in about 150,000 to 400,000 units, the result takes at least one week, but lasts for at least three weeks. Additional contributors reported the best results with 2 to 4 mg. of the water-soluble synthetic product.²¹ Administered intravenously, 2 mg. of this product produced a rapid response in from seven and one-half to eighteen hours^{22,31,32} as in oral administration, but with both methods the response lasted only a few days.³¹ In all, the amounts given intramuscularly and intravenously are proportionately less than those administered enterally, while subcutaneous administration, though reported favorably by some,^{28,34} requires further trial.

In surgical patients, therefore, with prothrombin deficiency indicating a potential tendency to or actual bleeding, vitamin K should be admin-

istered with bile salts to a point of satisfactory response in the prothrombin level preoperatively, and should be continued postoperatively for at least ten days, with the prothrombin levels used as the index.^{18,19,21,22} In emergencies and in the presence of actual bleeding, blood transfusions should be used to augment the prothrombin.^{19,22,26} Not only does the effect last only from six to twelve hours,¹⁹ but also fresh blood should be used,³⁵ for investigators have demonstrated that preserved blood as in "blood banks" is low in prothrombin content.^{35,36,37,38} In addition, they have shown that in cases of surgery of children within the first year of life, vitamin K should be amply supplied, for up to this period the prothrombin level is often unstable, deficient and not established;^{22,23,34} it is also directly concerned with the hemorrhagic disease of the newborn.^{21,34}

BIBLIOGRAPHY

- Holman, E. F.: Vitamin and Protein Factors in Pre-operative and Post-operative Care of Surgical Patient, Surg., Gynec. & Obst. **70**:261-269 (Feb. No. 2A) 1940.
- Croft, J. D., and Snorf, L. D.: Cevitamic Acid Deficiency; Frequency in Group of 100 Unselected Patients, Am.J.M.Sc. **198**:403-408 (Sept.) 1939.
- Wolfer, J. A., and Hoebel, F. C.: Significance of Cevitamic Acid Deficiency in Surgical Patients, Surg., Gynec. & Obst. **69**:745-755 (Dec.) 1939.
- Bean, W. B., and Spies, T. D.: Vitamin Deficiencies in Diarrheal States, J.A.M.A. **115**:1078-1081 (Sept. 28) 1940.
- Bessey, O. A., and Wolbach, S. B.: Vitamin A; Physiology and Pathology, J.A.M.A. **110**:2072-2080 (June 18) 1938.
- Ivy, A. C.: Application of Recent Contributions in Basic Medical Sciences to Surgical Practice, Internat. Abstr. Surg. **66**:1-8; 209-217; 403-441, 1938; in Surg., Gynec. & Obst. Jan.; March; May 1938.
- Imler, A. E., and Wammock, H.: Vitamin B₁ in Irradiation Sickness: Preliminary Report, Am. J. Roentgenol. **43**:243-248 (Feb.) 1940.
- Wegelin, C.: On Antagonism Between Thyroxine and Vitamin A, West. J. Surg. **47**:147-154 (March) 1939.
- Wolfer, J. A.: Surgical Aspect of Vitamin-C Deficiency, S. Clin. North America **20**:225-240 (Feb.) 1940.
- Abt, A. F., and Farmer, C. J.: Vitamin C; Pharmacology and Therapeutics, J.A.M.A. **111**:1555-1565 (Oct. 22) 1938.
- Whipple, A. O.: Critical Latent or Lag Period in Healing of Wounds, Ann. Surg. **112**:481-488 (Oct.) 1940.
- Lanman, T. H., and Ingalls, T. H.: Vitamin C Deficiency and Wound Healing; Experimental and Clinical Study, Ann. Surg. **105**:616-625 (April) 1937.
- Bartlett, M. K.; Jones, C. M., and Ryan, A. E.: Vitamin C Studies on Surgical Patients, Ann. Surg. **111**:1-26 (Jan.) 1940.
- King, C. G.: Physiology of Vitamin C, J.A.M.A. **111**:1098-1101 (Sept. 17) 1938.
- Lund, C. C.: Effect of Surgical Operations on Level of Cevitamic Acid in Blood Plasma, New England J. Med. **221**:123-127 (July 27) 1939.
- Compere, E. L.; Hamilton, B., and Dewar, M.: Influence of Vitamin D Upon Bone Repair; Healing of Fractures of Rachitic Bones, Surg., Gynec. & Obst. **68**:878-891 (May) 1939.
- Goisman, J., and Compere, E. L.: Healing of Fractures of Atrophic Bones, J. Bone & Joint Surg. **20**:587-603 (July) 1938.
- Smith, H. P.; Ziffren, S. E.; Owen, C. A., and Hoffman, G. R.: Clinical and Experimental Studies on Vitamin K, J.A.M.A. **113**:380-383 (July 29) 1939.
- Butt, H. R.; Snell, A. M., and Osterberg, A. E.: Preoperative and Postoperative Administration of Vitamin K to Patients Having Jaundice, J.A.M.A. **113**:383-389 (July 29) 1939.
- Snell, A. M.: Vitamin K: Its Properties, Distribution and Clinical Importance; Preliminary Report, J.A.M.A. **112**:1457-1459 (April 15) 1939.
- Cheney, G.: Clinical Value of Vitamin K, J.A.M.A. **115**:1082-1085 (Sept. 28) 1940.
- Butt, H. R.: Preoperative and Postoperative Use of Vitamin K in Cases of Deficiency of Prothrombin, S. Clin. North America **20**:1203-1210 (Aug.) 1940.
- Snell, A. M., and Butt, H. R.: Supplementary Report on Vitamin K, J.A.M.A. **113**:2056-2059 (Dec. 2) 1939.
- Larson, C. P.: Present Status of Vitamin K, West. J. Surg. **48**:352-356 (June) 1940.
- Stewart, J. D., and Rourke, G. M.: Control of Prothrombin Deficiency in Obstructive Jaundice by Use of Vitamin K, J.A.M.A. **113**:2223-2227 (Dec. 16) 1939.
- Andrus, W. DeW., and Lord, J. W., Jr.: Correction of Prothrombin Deficiencies by Means of 2-Methyl-1, 4 Naphthoquinone Injected Intramuscularly, J.A.M.A. **114**:1336-1337 (April 6) 1940.
- Walters, W.: Control of Hemorrhagic Tendencies, Surg., Gynec. & Obst. **70**:308-318 (Feb. No. 2A) 1940.
- Bollman, J. L.; Butt, H. R., and Snell, A. M.: Influence of Liver on Utilization of Vitamin K, J.A.M.A. **115**:1087-1091 (Sept. 28) 1940.
- Quick, A. J.; Stanley-Brown, M., and Bancroft, F. W.: Study of Coagulation Defect in Hemophilia and in Jaundice, Am. J. M. Sc. **190**:501-511 (Oct.) 1935.
- Warner, E. D.; Brinkhous, K. M., and Smith, H. P.: Quantitative Study on Blood Clotting: Prothrombin Fluctuations Under Experimental Conditions, Am. J. Physiol. **114**:667-675 (Feb.) 1936.
- Tage-Hansen, E.: Summary of Some Clinical Studies on Vitamin K, J.A.M.A. **113**:1875-1876 (Nov. 18) 1939.
- Norcross, J. W., and McFarland, M. D.: Intravenous Use of 2-Methyl-1, 4-Naphthoquinone in Hypoprothrombinemia; Clinical Observations, J.A.M.A. **115**:2156-2161 (Dec. 21) 1940.
- Rhoads, J. E., and Fliegelman, M. T.: Use of 2-Methyl-1, 4-Naphthoquinone (Synthetic Vitamin K Substitute) in Treatment of Prothrombin Deficiency in Patients, J.A.M.A. **114**:400-401 (Feb. 3) 1940.
- Poncher, H. G., and Kato, K.: Treatment of Hypoprothrombinemia Haemorrhagica Neonatorum (Hemorrhagic Disease of Newborn) with Vitamin K, J.A.M.A. **115**:14-17 (July 6) 1940.
- Rhoads, J. E., and Ravdin, I. S.: Control of Hemorrhage in Patients Operated on for Obstructive Jaundice, Rev. of Gastroenterol. **7**:169-176 (March-April) 1940.
- Ziegler, E. R.; Osterberg, A. E., and Hovig, M.: Prothrombin Changes in Banked Blood, J.A.M.A. **114**:1341-1342 (April 6) 1940.
- Quick, A. J.: Prothrombin in Preserved Blood, J.A.M.A. **114**:1342-1343 (April 6) 1940.
- Rhoads, J. E., and Panzer, L. M.: Prothrombin Time of "Banked Blood," J.A.M.A. **112**:309-310 (Jan. 28) 1939.

39. Butt, H. R.: Role of Vitamin K in Prevention of Hemorrhage Arising from Diseases of Biliary Tract, *S. Clin. North America* 19:891-898 (Aug.) 1939.
40. Ivy, A. C., and Gray, J. S.: Application of Recent Contributions in Basic Medical Sciences to Surgical Practice, *Internat. Abstr. Surg.* 69:1-7; 213-220; 409-416, 1939; in *Surg., Gynec. & Obst.* July, Sept., Nov. 1939.
41. Ivy, A. C.: Application of Recent Contributions in Basic Medical Sciences to Surgical Practice, *Internat. Abstr. Surg.* 67:1-8; 211-218; 407-414, 1938; in *Surg., Gynec. & Obst.* July, Sept., Nov. 1938.
42. Tenery, W. C.: Wound Healing, *South. Surgeon* 9:843-847 (Nov.) 1940.
43. Lord, J. W., Jr.; Andrus, W. DeW., and Moore, R. A.: Metabolism of Vitamin K and Role of Liver in Production of Prothrombin in Animals, *Arch. Surg.* 41:585-595 (Sept.) 1940.
44. Andrus, W. DeW., and Lord, J. W., Jr.: Clinical Investigations of Some Factors Causing Prothrombin Deficiencies: Significance of Liver in their Production and Correction, *Arch. Surg.* 41:596-606 (Sept.) 1940.

Box 2631.

DISCUSSION

DR. JOHN S. HELMS, JR., Tampa: It has been a privilege to have the opportunity to read and to hear presented the discourse of Dr. Chappell and has associates on the subject of vitamins as related to surgery. I am one of that army of less adventurous ones whom Dr. Chappell refers to as "carefully watching and waiting," all the while realizing that perhaps I am either behind the times or am unduly skeptical.

Be that as it may, there can be no legitimate doubt, even in the face of the present state of racketeering and commercialization of vitamins, that these substances have their value and unquestionably in time will take their place as part of the standardized surgical armamentarium.

The earlier known vitamins have been established as stabilizers or cures for a few definite diseases, and of course these conditions are met with not infrequently in patients who must undergo or who anticipate some surgical procedure. These patients then must be adequately prepared by furnishing them with an ample supply of these factors.

Vitamin K has, as Dr. Chappell said, probably provided more benefit in surgery than any other vitamin. Although it is of real value, it must be remembered that this vitamin is not a panacea for postoperative bleeding and is useless unless the bleeding is definitely caused by a deficiency of this factor, from whatever cause, with a consequent lowering of the prothrombin content of the blood. It should, therefore, not be used indiscriminately, as have other coagulants, for all types of hemorrhage. It will probably continue to find its greatest use as a preventive, particularly in surgery of the biliary tract.

DR. WALTER C. JONES, Miami: I have enjoyed the opportunity of reading Doctor Chappell's paper and studying it. He and his collaborators have made a very comprehensive survey of the subject and leave very little for the discussor to say except to relate some of his personal experiences regarding the use of vitamins in surgical measures.

When considering surgical patients, especially during the postoperative period one must always think of them as patients with avitaminosis and potential hypoproteinemia. This potentiality is increased by the loss of fluid either through emesis or through suction postoperatively, and in all suction cases should be borne in mind particularly. A great aid in the management of these postoperative cases is the use of nasal suction, but it carries with it a great danger. Avitaminosis and hypoproteinemia must be kept in mind in all of these cases, especially if there is prolonged drainage.

In respect to vitamin B, its action on the intestinal

tract produces a certain amount of tonicity, increased tonicity and peristalsis and is thus of some help perhaps in the management of normal postoperative cases in the prevention of ileus. It has been my observation in handling cases of severe peritonitis following prolonged suction, particularly on two occasions when in fear of avitaminosis large doses of vitamin B were administered, that there was a considerable rise in temperature within the twenty-four hour period following administration. It has put me on guard in respect to the use of vitamin B in the management of these cases of peritonitis. This is purely a question for thought, and I should like it to be considered further as cases of peritonitis continue to be observed.

Certainly vitamin C is of inestimable value in a certain class of surgical patients, and in these cases it is no great effort to keep the vitamin C requirement up to normal. I have one friend who has recurrent ulcers of the gastrointestinal tract, and he has been able to get complete relief from all symptoms by massive doses of vitamin C. This has been a rather interesting observation to me. Perhaps it is a factor that may well be borne in mind in the management of ulcers in the gastrointestinal tract.

Both the essayist and the original discussor have emphasized the use of vitamin K. I will not go into that further except to say that it has been the greatest aid we have had in the management of cases with severe jaundice. Vitamin K is absolutely a godsend to the surgeon in the management of these cases. The essential thing, of course, to bear in mind in cases of obstructive lesions of the biliary tract with jaundice, is that there must be administered at the same time bile salts to get the best results from vitamin K.

I have enjoyed the paper very much.

DR. KENNETH A. MORRIS, Jacksonville: I want to discuss two aspects of this excellent paper. If there is any doubt about the efficiency of some of the vitamins, one has only to watch some patients postoperatively. They are not vomiting, have no distention and the fluid level has been maintained. In short, they are in good condition, but are receiving no food by mouth. With the administration of 1,000 cc. of 5 per cent glucose in solution every eight hours the patient may still develop pellagra or signs of pellagra. Some of these patients have ulcers in the mouth and seem to be going downhill. It was recently shown at the Medical College of Virginia that a patient stores up a certain amount of vitamin, especially vitamin B complex. If given glucose, he has to use this store of vitamin in order to burn it up. The exact mechanism is not known. If he continues to have a large amount of glucose or food without vitamins, he will deplete his reserve supply. Porter pointed out that in animals hibernating without any food whatsoever deficiency diseases do not develop. Someone has noted that Mahatma Gandhi has never suffered from deficiency diseases. He takes no food whatsoever and only water for a great length of time. If a patient is getting glucose and salt and the intake balances, but he seems to be going downhill with signs of pellagra, it is well to try to supply a sufficient amount of vitamin B or nicotinic acid.

Most of the cases of mechanical obstruction caused by stones, when there is no hepatic damage, will respond to vitamin K. This response, by the way, is one of the best liver function tests available. A patient who is jaundiced, has a low prothrombin level and does not respond to vitamin K usually has a damaged liver. The first thing to do in this type of case is to try to increase the amount of vitamin K. This attempt has not worked out very satisfactorily. Giving synthetic vitamin is intended to increase the prothrombin level, but it has not done so to any great extent when the liver is damaged. Transfusions for many years have increased the prothrombin level, just how is not known.

Another method that may be used in an effort to maintain a normal prothrombin level, is to give the pa-

tient a proper diet. Ravden has recently shown that what the liver needs to restore function is not only glucose but a large amount of protein. Dogs treated for chloroform poisoning were protected better when given proteins than carbohydrates alone. A diet of 75 per cent carbohydrate and 25 per cent protein with practically no fat protects the liver and usually effects the desired response more quickly.

I have enjoyed this paper very much.

DR. CHAPPELL, (concluding): I wish to thank Dr. Helms, Dr. Jones and Dr. Morris for their helpful discussions.

In closing, I should like to say that for the last two years my colleagues and I have been very much interested in the use of two vitamins preoperatively, vitamin B complex and vitamin C. Being from central Florida, naturally we are interested in vitamin C because one of the greatest sources of vitamin C is the juice of the citrus fruit of this section, particularly orange juice. We have something like 100 operative cases now in which we have been using vitamin B complex and vitamin C, and we hope to make comparisons with 100 others in the near future. We feel that there is definite benefit to the patients who have been given vitamin B complex and vitamin C preoperatively and postoperatively. We feel also that there is a decided decrease in the amount of postoperative discomfort after using vitamin C in these 100 cases, and that there is an appreciable improvement in wound repair. We hope to be able to give something more definite on this subject in the near future.



MODERN METHODS OF IMMUNIZATION

THOMAS M. PALMER, M.D.
JACKSONVILLE

Physicians who are concerned with the immunization of infants and children have as their goal the employment of materials which will not sensitize the patient and the utilization of routes of administration as well as minimum doses that cause the least discomfort. In employing modern methods of immunization, which definitely assist in attaining this goal, they use combined antigens and the intradermal route.

The evolution of diphtheria toxoid, alum precipitated, marked a great advance from the days of toxin-antitoxin. In like manner the evolution of tetanus toxoid, alum precipitated, marked a real advance. It became a boon to those who would have required tetanus antitoxin in prophylactic doses.

Some two years ago, preparatory to administering 1,500 units of tetanus antitoxin to a 3 year old boy, I injected a test dose of 0.1 cc. intradermally. There was no family history of allergy nor had the boy shown signs of hypersensitiveness. Within ten minutes, however, the lips were greatly swollen, the eyes were puffy, there was generalized itching, and the site of injection of the test dose showed well marked

pseudopod formation over a large area. Several hours later 1 minim of antitoxin and 3 minims of adrenalin were given intradermally, and the same type of reaction resulted. It was deemed inadvisable to administer further amounts of antitoxin. Even so, the boy suffered a typical attack of serum sickness eight days later. It is easy to imagine what would have happened had one given him 1,500 units of tetanus antitoxin without a skin test.

With this experience in mind, plus the knowledge that a single boy may sustain many injuries, each of which warrants protection against tetanus, I desire to direct attention to the use of tetanus toxoid, alum precipitated. In 1936 Jones and Jamieson¹ showed that guinea pigs which had received one or more injections of tetanus toxoid, alum precipitated, were protected against infection with large doses of tetanus spores, injected within two months, while unprotected pigs were killed within from eighty-eight to one hundred and twelve hours.

Brown and Etris² studied the antitoxin content of the blood following injections of tetanus toxoid. The initial injection produced a small amount while a second injection, given from sixty to ninety days later, produced an appreciable increase in antitoxin. In many cases this antitoxin content of the serum had increased a thousandfold within one hundred and eight days after the second injection. After an interval of thirteen months in 76 per cent of the cases from 0.01 to 0.07 unit of antitoxin was present in the blood, enough to afford a certain degree of protection in the opinion of some investigators. Then a third injection of 1 cc. was given. Ten days later, these authors reported, 10 per cent had from 7 to 12 units per cubic centimeter of serum, 60 per cent had from 1.2 to 5 units and 30 per cent had from 0.4 to 1 unit. All patients were protected 100 per cent.

Gold,³ also, observed that several days elapsed between the administration of the second dose and the appearance of a so-called protective titer in the blood serum. Thus, if one is injured during the interim between the first and second injections, or during a week or two following the second injection, passive immunization with tetanus antitoxin is necessary. Furthermore, he observed that at the time an injury is sustained a repeat or stimulating dose of toxoid is necessary. "One week after the repeat dose the antitoxin titre of an immunized subject is

¹Read before the Health Officers' Meeting, Jacksonville, Apr. 28, 1941.

from two to fifty times greater than the titre produced by the injection of 1,500 units of tetanus antitoxin," he stated.

In addition, Gold³ showed that, in most cases, there is a five day interval between the repeat or stimulating dose and the development of 0.1 unit of antitoxin per cubic centimeter of serum. It is accepted that 0.1 unit of antitoxin per cubic centimeter of blood serum is considered the protective level. This investigator brought up the very interesting point of protection when he mentioned that the usual incubation period of tetanus in man is from six to fourteen days. When, however, this period is six days or less, as it is wont to be in fatal cases, will there be sufficient time following the repeat or stimulating dose for the development of antitoxin in an amount equal to the protective level of 0.1 unit or thereabouts? This author believed that such protection would be forthcoming.

COMBINED DIPHTHERIA-TETANUS TOXOID ALUM PRECIPITATED

Jones and Moss⁴ clearly demonstrated that the combining of diphtheria and tetanus toxoids does not in the least interfere with "the specific immunity response." Also, they advocated an interval of at least two months between the first and second injections, and concluded that a three month interval might even be more effective.

For the last three years I have been employing combined diphtheria-tetanus toxoid, alum precipitated (Lilly). There have been no untoward reactions. The use of these combined toxoids brings up the following questions. The answers⁵ clarify the matter.

QUESTION. Is the two month interval between the two doses of toxoid too short?

ANSWER. The more recent recommendation for this interval is three months. The longer the interval between doses the better the immunizing response.

QUESTION. Should three doses rather than two be given?

ANSWER. Two doses represent the usual immunization.

QUESTION. After the second dose, when may one safely conclude that the patient is immune to tetanus?

ANSWER. Fernan-Nunez⁶ tested the antitoxin titer of 20 students ten days after the second dose of alum precipitated tetanus toxoid was ad-

ministered. In each instance the serum contained more than 0.25 unit of antitoxin per cubic centimeter of blood serum.

Rogers⁷ stated that usually from seven to ten days after the second dose the antitoxin rises to more than 0.1 unit per cubic centimeter of blood serum, even though the second dose is given as long as two years after the first dose. He asserted that adequate immunity develops certainly by the fourteenth day after the second dose. It is safe to say that the maximum titer of antitoxin will be reached in a month after the second dose.

QUESTION. Two months following the second injection of combined diphtheria-tetanus toxoid I perform the Schick test. If the results are negative, the patient is considered immune to diphtheria and tetanus. Am I correct in telling the parents that any injury sustained during the next twelve months will not necessitate the injection of an additional dose of tetanus toxoid?

ANSWER. That procedure is not advised. The recommended procedure is to give an additional dose of tetanus toxoid in case of subsequent exposure to tetanus.

QUESTION. How long does the patient have complete protection against tetanus following primary immunization?

ANSWER. Rogers⁷ stated that the antitoxic titer may be maintained at a protective level for not longer than ninety days, or it may persist at the same level for several years.

According to Stewart,⁵ Peshkin reported that adequate immunity was maintained for three months and that there was then a progressive drop. At the end of two years only 42 per cent of the patients in his series had 0.01 unit of antitoxin per cubic centimeter of blood serum. Probably if they had 0.001 unit, they were protected, however; but he chose 0.01 unit as the protective level. The fall in titer to the lowest levels was slower in the children injected at intervals of from five to ten months than in those injected at shorter intervals.

Every person in Jones and Moss's series⁴ had an amount of antitoxin sufficient for titration a year after the primary immunization. Cowles⁸ reported that men immunized a year previously had from 0.02 unit to 0.2 unit per cubic centimeter.

Thus it would seem that there is a considerable degree of variation in the antitoxin unitary content of the blood over a period ranging from a few months to a year or more. But, while the

titer decreases, the ability to produce antitoxin rapidly has been established and a repeat injection raises the antitoxic titer rapidly. In about five days it is 0.1 unit with a continued rise over a period of thirty or more days.

The intradermal route of immunization is now to be considered. Tuft⁹ stated:

In addition to purely mechanical protection the skin also seems to have a specific biologic function designed to protect the internal organs from disease agents possibly by formation of immune antibodies excited by strong skin stimulation. . . . In certain infectious diseases cutaneous antibody formation may be a means by which immunization of the entire body is brought about.

That the active antibody response after intradermal injection may be due in part to the slower absorption of the antigen is entirely possible altho this process may in turn allow for a local fixation of antigen and thus greater local stimulation of antibody.

SCARLET FEVER IMMUNIZATION BY INTRA- DERMAL ROUTE

Young¹⁰ observed that the medical profession is by no means in agreement as to the advisability of immunizing against scarlet fever. He directed attention to the fact that some physicians believe negative results of the Dick test following immunization with the five doses of toxin indicate a desensitization of the skin to the rash and that the organisms causing scarlet fever may still infect the throat, but without producing a rash. The danger here is obvious.

Dick¹¹ advised in a personal communication that Hoyne subscribed to this view. Nevertheless he required that nurses, interns and students at the Chicago Contagious Hospital be immunized. Furthermore, Dick added, this view, that immunization protects against the rash alone, has been abundantly disproved.

Fear of reactions and multiplicity of injections are among the reasons mentioned by Koehler¹² for not immunizing children. On the other hand he directed attention to the following good reasons for carrying out an immunization program:

1. The prolonged period of infectivity, as shown by the studies made in Milwaukee, is an important consideration. In this investigation hemolytic streptococci were recovered in cultures from the throats of 43 per cent of 3,000 patients with scarlet fever from one to three months after quarantine had been lifted.

2. "The rate per thousand for inoculated children (referring to the number of cases of scarlet fever) is approximately 2.8; for the non-immunized school population it is 80 per thousand."

3. A negative culture of the throat in one who has had scarlet fever is no proof that he or she may not transmit the disease.

4. The number of atypical cases makes immunization important. Roughly in 25 per cent of the cases no rash is observed and they pass as cases of simple tonsillitis. Thus the disease may be spread.

Fisher and Van Gelder¹³ recently reported their work on intradermal immunization against scarlet fever. They gave three intradermal injections of 800, 1,600 and 3,200 skin test doses respectively at intervals of two and four weeks. In the original Dick method 500, 2,000, 8,000, 25,000 and 80,000 skin test doses were given at seven day intervals. These authors recommended that injections be given on the outer aspect of the upper part of the arm. Dilutions were prepared freshly each time an injection was to be made. The fifth dose of Dick toxin was diluted with normal saline so that the requisite number of skin test doses was contained in 0.1 cc.

Reactions were negligible, these investigators reported, and they followed most often the first injection. In their series of 180 cases the reactions were classified as follows: headache in 6 per cent, temperature of from 99 to 102 F. in 5 per cent, emesis in 5 per cent and scarlet rash in 1.7 per cent. One patient experienced an anaphylactic-like reaction following the second and third doses of toxin. Reactions appeared within forty-five and ten minutes after administration of the respective doses. The symptoms were promptly relieved by adrenalin 7½ minims. Neither necrosis nor severe tissue reaction was observed, and there was no regional adenitis.

The Dick test at the end of three months was 100 per cent negative in their series whereas with the original Dick method 90 or 95 per cent of the tests could be expected to give negative results. These authors concluded:

As yet one cannot say anything definite about the duration of immunity. Nevertheless since the Dick reaction became negative in all subjects whereas with the subcutaneous method only 90-95% of the Dick reactions became negative, it is reasonable to assume that the length of immunity will be as great as with the subcutaneous method.

The Dick test was performed two weeks after the last immunizing dose and at varying intervals up to six months. The authors very strongly advised running a control test using Dick test material heated for 1½ hours in boiling water. They stated:

We found a number of children with positive reactions to the control test. . . Sensitivity to the protein in the toxin reached its height about three months after the last dose of toxin.

TYPHOID VACCINE INTRADERMALLY

In 1931 Tuft^{9b} showed that one could be immunized against typhoid fever as well by the intradermal as by the subcutaneous route.

Siler and Dunham¹⁴ reported their results obtained from revaccination of subjects by the intradermal route. They concluded:

The results obtained indicate that the immunological response of the individual to revaccination with one dose of 0.1 cc of vaccine intracutaneously parallels that following the initial vaccination with three subcutaneous injections of 0.5 cc, 1 cc and 1 cc of the vaccine at weekly intervals.

Furthermore, the reactions were mild. These authors also emphasized the fact that revaccination should be performed from two to four years following primary vaccination.

In 1940 Tuft^{9c} reported further studies of the intracutaneous method. He recommended the injection of 0.1 cc., 0.15 cc. and 0.2 cc. of typhoid vaccine at weekly intervals. He, like Siler and Dunham¹⁴ believed that a "single dose of 0.1 cc. seems adequate for immunization of previously vaccinated persons."

It is best to give the first dose on the flexor surface of the forearm. Subsequent doses are given on the outer aspect of the upper arms.

BIBLIOGRAPHY

1. Jones, F. G., and Jamieson, W. A.: Studies on Tetanus Toxoid; Antitoxic Response in Guinea Pigs Immunized with Tetanus Alum-Precipitated Toxoid Followed by Tetanus Spores, *J. Bact.* **32**:33-40 (July) 1936.
2. Brown, C. P., and Etris, S.: Tetanus Toxoid Immunization, *M. Bull. Vet. Admin.* **16**:25-29 (July) 1939.
3. Gold, H.: Active Immunization Against Tetanus, *Ann. Int. Med.* **13**:768-782 (Nov.) 1939.
4. Jones, F. G., and Moss, J. M.: (a) Combined Diphtheria Toxoid and Tetanus Toxoid, Alum Precipitated; Prolongation of Accelerated Immunity Following Stimulating Dose of Antigen, *J. Lab. & Clin. Med.* **24**:512-516 (Feb.) 1939. (b) Studies on Tetanus Toxoid; Response of Human Subjects to Injection of Tetanus Toxoid or Tetanus Alum Precipitated Toxoid One Year After Immunization, *J. Immunol.* **33**:183-190 (Sept.) 1937.
5. Stewart, E. G.: Personal communication.
6. Fernan-Numez, M.: Tetanus Toxoid: Active Immunization Against Tetanus, *Wisconsin M. J.* **37**:21-24 (Jan.) 1938.
7. Rogers, R. P.: Use of Tetanus Toxoid in Private Practice, *Bull. New York Acad. Med.* **15**:553-559 (Aug.) 1939.
8. Cowles, P. B.: Tetanus Immunization, *Yale J. Biol. & Med.* **9**:409-416 (May) 1937.
9. Tuft, L.: (a) Skin as Immunological Organ, with Results of Experimental Investigations and Review of Literature, *J. Immunol.* **21**:85-100 (Aug.) 1931. (b) Active Immunization Against Typhoid Fever, with

Particular Reference to Intradermal Method, *J. Lab. & Clin. Med.* **16**:552-556 (March) 1931. (c) Further Studies of Intracutaneous Method of Typhoid Vaccination, *Am. J. M. Sc.* **199**:84-90 (Jan.) 1940.

10. Young, J. G.: Immunization Against Communicable Diseases; What, When and Why, *Texas State J. Med.* **34**:372-373 (Sept.) 1938.

11. Dick, Geo. F.: Personal communication.

12. Koehler, J. P.: Prevention and Treatment of Scarlet Fever, *Nebraska M. J.* **21**:201-209 (June) 1936.

13. Fisher, S., and Van Gelder, D. W.: Intradermal Immunization; Scarlet Fever, *J. Dis. Child.* **61**:88-98 (Jan.) 1941.

14. Siler, J. F., and Dunham, G. C.: Duration of Immunity Conferred by Typhoid Vaccine; Results of Re-vaccination by Intracutaneous Injection of Typhoid Vaccine; Laboratory Staff, *Am. J. Pub. Health* **29**:95-103 (Feb.) 1939.

1819 Goodwin St.

A YEAR'S SERVICE "EYE" AT THE FLORIDA STATE HOSPITAL IN RETROSPECT

F. V. GAMMAGE, M.D.
CHATTAHOOCHEE

During a period of a little over a year I have been the oculist at the Florida State Hospital, where the Eye Service is most interesting. Approximately 100 new admissions pass through the department every month besides many other patients from hospital wards, who are sent in with every imaginable ailment. At one time one entire ward, isolated, was filled with patients suffering from pink eye.

Beginning at the beginning, the Florida State Hospital has few births, and therefore ophthalmia neonatorum is unknown here. A few words on this subject are, however, apropos. Ever since Credé advocated his prophylaxis of gonorrhea in the eyes of the newborn, it has been generally used by the medical profession, but ophthalmia neonatorum continues to exist in spite of this preventive measure. Prophylaxis of this disease should begin prior to placing a drop of one or two per cent solution of silver nitrate in each eye of the child immediately after birth.

The only case of puerperal sepsis that came under my care in thirteen years of general practice was that of a young woman aged 20, a primipara, who one week before delivery had had sexual intercourse with her husband, who had gonorrhea. She died three days postpartum. The antepartum care in obstetric cases looms up as every bit as important as the actual delivery and

Read before the quarterly meeting of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society, Chattahoochee, July 17, 1941.

after-care. Smears should be taken of the cervical canal and urethra during the months of antepartum care, and every effort should be made to clear up a gonorrheal infection before delivery. At the time of delivery the vaginal canal should be cleansed thoroughly as it is to be remembered that the whole infant body is infected with the gonorrheal discharge, if it is present. Washing the baby thoroughly, especially the head, whether with soap and water and olive oil or with olive oil alone is essential. I, personally, consider the use of argyrol useless. Credé's original method is best. It is not sufficient, however, merely to drop the silver nitrate on the palpebral fissure. The lids should be separated with lid retractors if necessary, and a drop or two of 1 per cent solution of silver nitrate should be dropped on the eyeball. It was not my custom to wash off the excess with normal saline, and among my patients no case of gonorrheal ophthalmia in the newborn occurred.

The cure of ophthalmia neonatorum today is simple, providing one sees the baby immediately. A good nurse is essential. My orders are to wash the pus out of the baby's eyes every time it collects, day and night. Saturated solution of boric acid is as good as anything, and a drop of 1 per cent solution of silver nitrate is instilled three times a day. Overtreatment with too strong a solution is worse than useless. I once saw a 5 per cent solution of silver nitrate used, with the inevitable result of a large corneal scar. The patient might as well have had his gonorrheal ophthalmia with no treatment at all. The new sulfanilamide drugs are indispensable in ophthalmia neonatorum. Their role is just as magical as in streptococcic infections and pneumonia. My experience with the use of sulfanilamide in ophthalmia neonatorum has been that it clears the condition up in two or three days. My practice is to give 1 grain of sulfanilamide per pound daily with an equal amount of sodium bicarbonate.

I have given in detail my idea of the way in which the prophylaxis of gonorrhea should be handled because of the sequelae, which I see every day in patients at the hospital. There are many patients with eyes blind or near blind from gonorrhea. Also, corneal scars, corneal applanation, iridocyclitis with annular posterior synechia, glaucoma, cataract, phthisis bulbi and other conditions all have their bearing on the cause of the insanity of these patients. It is clear that a

purely preventable disease of the eye will certainly aggravate the mental disease of a person and in many cases may have been the straw that broke the camel's back and precipitated the psychosis.

The adolescent period brings eye problems of its own, chief among which is the matter of proper refraction of the eye. During the last year or more I have treated the eyes of many boy prisoners. I was impressed by the fact that the condition of the eyes in many cases was directly the cause of the criminal tendencies. Obviously, if a child has ocular disease and needs glasses, or merely needs glasses, that child is not going to like school and he is going to play hooky and commit crimes in his idleness. In many cases he steals an automobile in which to enjoy himself in his truancy from school as was true of some of the boys I treated.

In the first place, I found what I thought to be an epidemic of trachoma among the boys. Almost all who came to me were suffering from granulated lids. It is indeed a wise ophthalmologist who can positively diagnose a case of trachoma at first sight. I claim no such omniscience. I isolated the patients in cases of infection and treated them for trachoma. As the boys kept coming in and the treatment was kept up on the first cases, I noted that in from three to four weeks the condition began to clear up. This fact clinched my diagnosis.

What I was treating was not trachoma, but chronic follicular conjunctivitis. Trachoma is not cured in three or four weeks, and indeed it may never be cured. So far I have seen only one genuine case of trachoma at the Florida State Hospital, and that was in a boy. This patient, I am proud to say, is clinically well, but it took six or more months to effect the cure. There has not been a single instance of contagion from that case in the hospital.

The characteristic diagnostic difference between trachoma and chronic follicular conjunctivitis is in the appearance, location and course of the granules. The granules in trachoma are larger, tougher and more nearly round; they occur equally in both upper and lower cul-de-sacs, whereas in chronic follicular conjunctivitis the granules are smaller, softer, and in varied shapes, and are located mostly in the lower cul-de-sac. They appear rather as pinpoint stipplings than real granules or follicles. My treatment for them

is to cocaineize the conjunctiva, evert the lids and cauterize with 10 per cent solution of silver nitrate, washing it off immediately with normal saline. This cauterization of the lids is repeated every week or two.

I always cauterize the lids in this way with great trepidation because the treatment is painful despite the fact that I use a 10 per cent solution of cocaine and not one of the various substitutes, such as butyn or pantocain. I think the more experience one has, the more one realizes that, so far, there is no substitute for cocaine. Because this operation is painful, the patient flinches and cries, and the danger is that the hold on the lid may be wrenched loose. Should the lid be released even momentarily before the normal saline is applied, a bad corneal burn will result, and a scar will form later. So far, however, I have been fortunate as I have not had this unfortunate accident to happen. For a wash in between times, I use a $\frac{1}{2}$ per cent solution of zinc sulfate in the daytime and a $\frac{1}{2}$ per cent ointment of this substance in the eyes at night.

After many months this epidemic of chronic follicular conjunctivitis was finally mastered. There are only one or two cases now.

In the meantime, I fitted glasses for dozens of boys. Their need of glasses brings up the whole subject of refraction and the conservation of vision in the school child. The thing that impressed me was the large number of refractive errors that presented themselves for alleviation. There were many cases of strabismus in which, because of the age of the boys the squint deviation had been corrected, but there remained the inevitable amblyopia ex anopsia. The vision would be like this: for the right eye 20/200 and not improved with glasses; for the left eye 20/20, $+ 2.00 = 20/15$.

Examination of the fundus of the eye in which the amblyopia was present would be negative, but still the patient could neither see nor be made to see. This condition is of course pitiable in that amblyopia ex anopsia from strabismus can definitely be prevented, and all can help materially by picking out cases of this condition and referring the patient to the oculist. Glasses fitted at an early age will usually prevent its occurrence. There is generally a high degree of hyperopia and anisometropia, which taxes the powers of convergence of the infant, and when an intercurrent infection incident to diseases of

childhood like measles, mumps and whooping cough, comes along, the overstrained muscles of convergence and accommodation give up the fight from utter exhaustion and the eye with the greater error of refraction, usually snaps in out of the direct line of vision and rests comfortably in the position of internal squint or strabismus to the utter desolation of the child's parents primarily and of the poor patient as well, for as he grows older, he has to face the ever increasing struggles and vicissitudes of life cockeyed.

The answer to this problem is the refraction of the eyes of children with this condition and the proper fitting of glasses. The youngest child for whom I have ever fitted glasses was fourteen months of age. To fit glasses on a baby requires great patience but it can be done. One may inquire, "What's the good? The baby won't wear them and will break them up." My answer is, "The baby will wear them and will actually cry for them, just as he does for his food, simply because he can see so much better with them than without them."

Many of these boys I was unable to help by glasses. Corneal scars from injury or disease, iridocyclitis, retinitis, choroiditis, optic neuritis and even optic atrophy were conditions encountered, many of them preventable.

Among the nurses and attendants of the Florida State Hospital there is a high incidence of infections of the eye from contact with infected patients. Pink eye is endemic in this institution all the time. Employees as well as patients suffer from it. If cases of this disease are discovered immediately, my treatment is simple. It consists of the use of an eye wash of saturated solution of boric acid every three hours during the day and the filling of the conjunctival sac with a 5 or 10 per cent ointment of boric acid at night. Acute cases usually clear up in four or five days. In many cases, however, pink eye is superimposed on a chronic catarrhal conjunctivitis, and it is necessary to use zinc sulfate to clear up the disease. In treatment I prescribe zinc sulfate in $\frac{1}{2}$ per cent solution every three hours during the day and a $\frac{1}{2}$ per cent ointment of this substance in the eyes before retiring. Usually a week of this treatment effects a cure.

If cases of pink eye are neglected, corneal ulcers, suppurative conjunctivitis, scleritis and even endophthalmitis, with loss of the eye, may ensue.

One trying complication of pink eye that I encountered was chronic follicular conjunctivitis simulating trachoma. The granules were identical with those of trachoma. In this case response was so slow that it was necessary to continue treatment for three months. Thus the necessity for prompt adequate treatment in this apparently innocuous disease is indicated.

The twelve hour night service at the Florida State Hospital is responsible for an endless stream of complaints pertaining to the eye. I can usually detect persons affected by this service for their eyes are red and injected with black circles under them. They look worn out and expressionless, and even lose weight. They usually complain of asthenopia or eye strain. They find that their eyesight is growing weaker, they tire easily, they cannot read and their eyes burn, hurt and become bloodshot. In these conditions refraction is useless. Sometimes I have the patients transferred to day service, whereupon the symptoms promptly clear up.

Now I wish to direct attention to a most insidious disease whose consequences are tragic, retrobulbar optic neuritis. A few cases have come under my observation here. A patient may be going along in perfect health, although I must admit that usually he has or has had sinusitis or colds or la grippe. Some morning he wakes up with comparative blindness in one eye; sometimes the neuritis attacks both eyes at once, but usually only one eye is affected. Examination reveals vision of 10/200 or 20/200 as against 20/20 in the unaffected eye. In two cases I have operated.

The optic nerve runs parallel in the orbit with the cells of the ethmoidal labyrinth and sphenoid. Sometimes it runs through them. When there is a concurrent sinusitis of the ethmoid and sphenoid sinuses, the infection crosses over to the optic nerve, and since the intraocular portion cannot be reached and only the retrobulbar portion is involved, there is a retrobulbar optic neuritis with symptoms of failing vision, contraction of the peripheral field of vision, enlargement of the blind spot and central scotoma for green and red, this last caused by primary involvement of the papillomacular bundle of optic nerve fibers.

It is well for the physician to be on the lookout for cases of this kind and at the first complaint of failing vision to refer the patient to the ophthalmologist, who can evaluate the condition

properly. The only cure is complete ethmoidectomy and sphenoidectomy, even despite negative findings. The paranasal sinuses are so deep-seated and beset with so many remote recesses where infection may lurk, that the only safe procedure, when blindness is threatened, is bold radical surgery to save sight.

Ocular enucleations are fairly frequent here, and in the vast majority of cases result from old absolute glaucoma with cataracts. Simple primary chronic glaucoma is usually the cause of these end conditions which come to operation here in patients in the declining years of life. It is opposed to the primary acute congestive variety with its explosive symptoms of sudden pain, redness, dimness of vision and high tension, in which patients immediately find their way to the oculist clamoring for relief. The primary chronic variety is insidious in onset. The patient knows nothing of its presence at first. As time goes by, he takes aspirin for headache, goes to the optician for failing vision and buys glasses. Sometimes he frequents the optical counter of the ten cent store, especially the presbyope, for frequent changes in reading glasses. In cases of this type the physician can save the patient from early blindness by being on the watch for complaint of persistent headache, apparently without cause, with failing vision.

Taking the tension of the eyeball is the secret. With a little practice it is possible to distinguish even a slight increase in tension. My method is to play both index fingers on one eyeball and then the other, comparing the tension. For practice one may touch the tip of the nose, which compares with the normal eyeball, and then touch the bony dorsum of the nose, which gives the same sense of touch as in a glaucomatous eye with increased tension. This simple procedure will save many eyes which otherwise would be doomed to blindness.

One would suppose that in a mental hospital there would be an endless number of injuries of the eye. This is not true. There are many black eyes, but in 99 per cent of these traumas, the eyeball itself escapes injury. I have seen few actual injuries of the eyeball proper inflicted by patients on patients or employees.

The low incidence of corneal ulcers at the Florida State Hospital also impresses me. In private ophthalmologic practice the treatment of corneal ulcers, whether traumatic or infectious,

constitutes a major duty. Here few ulcers are observed. Their infrequent occurrence may be occasioned by the good protection of patients, the lack of much machine labor among the employees, and also a well rounded diet sufficient in the vitamins. Riboflavin deficiency is a factor in many ocular diseases including corneal ulcers.

Cataracts are seen here in great profusion and of every variety, from the congenital stationary type in the youths to the morgagnian cataract of senility. Needless to say, among patients who are insane they present a surgical problem as the disturbed mental condition renders a cataract extraction, which above all requires full cooperation of the patient both before and after operation, a most hazardous procedure.

In conclusion I wish to give my impression of a year's experience of an oto-ophthalmologist in the Florida State Hospital. It is indeed pitiable that so little is known of insanity and that what little is known is so little known generally and especially among physicians. I make this statement with no thought of criticism as I know that before I came to the Florida State Hospital, I knew practically nothing of psychiatry. During a term in my senior year at medical college I attended weekly lectures at the State Hospital at Columbus, Ohio. Up to a little more than a year ago, I had had no further contact with a mental institution. Since working here I realize how important psychiatry is to the profession and to the laity.

I think that a three or four months' psychiatric service in a medical student's first year of internship should be a requisite for an M.D. degree and a license to practice medicine. This requirement would impress all with the crying need for more knowledge and better care of the insane. As a novice in psychiatry, I venture to express my impression of this branch of medicine.

While heredity plays some part in insanity, the extent of its role has not been proved. What one does know is that insanity crops out everywhere from the highest to the lowest grades of society, among the rich and among the poor alike. The population of the Florida State Hospital is a fairly representative cross section of the whole people of Florida. There are rich here and poor, educated and ignorant. There are doc-

tors, preachers, lawyers, engineers, business men and representatives from every class of society.

One is impressed on talking to the patients that some stress, social, economic or marital, has precipitated their plight. Possibly a broken home in childhood, a job lost in youth, a divorce, a death or an accident has apparently tipped the scales in what was to all appearances a normal life, and the patient becomes insane.

Insanity is likened to a storm. The brain represents the telephone wires and lines that cross the nation. The storm comes along, and the wires are torn down and otherwise thrown into confusion. The patient's thinking is all twisted up; he sees things that do not exist and hears things that are not audible. Thoughts are delayed, obstructed; he imagines that he is under the control of outside forces; his feelings, fears, hates, likes and dislikes are depressed, blunted, removed or grossly exaggerated.

I speak, of course, only of cases in which no definite physical findings are evident on the surface. The ones that result from disease or injury fall into a different category. The cure of the psychosis depends entirely upon the elimination of the physical condition if possible. A clearer understanding of psychotic processes by the public and the medical profession is prerequisite to the proper help and care of the unfortunate persons thus afflicted.

It is unfortunate that in Florida the only place for a patient who becomes suddenly insane is the jails of the state. There are hundreds of insane patients at all times in the jails, handcuffed, locked up and shackled as ordinary criminals. This is a bad start in the care and cure of mental patients, and in most cases it takes weeks to undo the psychic trauma of the initial weeks or months of incarceration.

The average patient, after a reasonable period of hospitalization, quiets down and becomes adjusted to hospital life. He begins to take an interest in himself and his surroundings and acts altogether like a normal human being. If instead of the enforced confinement and idleness, he could have a reasonable amount of freedom and work to do, he would become an asset to society instead of the liability that thousands of these patients at the Florida State Hospital are year in and year out, draining the taxpayers of the state and adding to the general misery.

I visualize the time when the hills surrounding the Florida State Hospital will be dotted with large workshops, barns, farm houses and recreation halls, wherein the patients will work, occupy their hands and minds with constructive endeavor and also divert themselves with pleasurable pursuits, such as painting, art, pottery, education, the cinema, drama and the stage. There is no reason why the Florida State Hospital should not be entirely self supporting, relieving the taxpayers of the state of its financial burden and even adding to the wealth of the state by surplus production.

Medical science has progressed far, but little has been accomplished in the medical and surgical cure of psychoses. There is no doubt that some day a medical scientist will find the cure for pure psychoses. Some simple thing, like insulin in diabetes, sulfanilamide in streptococcic infections or the thyroid hormone in cretinism, will revolutionize psychiatric practice overnight, leaving for institutional care only those patients who suffer mental derangement because of physical disorders and a small percentage of incurables such as is always present in any pathologic group. In the meantime, I would bespeak a more lively interest in these unfortunate persons by the general public of whom they are an integral part, and above all by the medical profession.

Florida State Hospital.



DOGS AND TULAREMIA

Evidence that dogs may be susceptible to infection with tularemia (rabbit fever) is presented in The Journal of the American Medical Association for December 13 by L. F. Ey and R. E. Daniels, Columbus, Ohio, who report an instance in which they found the disease occurring in 3 dogs and their master. The dogs recovered, whereas the owner died. Heretofore it had been considered by many that dogs possessed a natural immunity to the disease.

The owner of the 3 dogs went hunting with them on Nov. 6, 1940. The dogs ran down a rabbit which they killed and the master divided it into three pieces, giving one to each dog. The following day the youngest dog became ill and the other 2 dogs became ill a day or two later. On November 9 the owner of the dogs became quite ill with chills and fever and on November 11 he was hospitalized. Although he received antitularense serum treatment the owner of the animals died on November 16. Blood specimens from each of the 3 dogs were positive for the tularemia organism.

A PLEA FOR THE CONSERVATIVE TREATMENT OF THE INEVITABLE AND INCOMPLETE ABORTION

WILLIAM CARMEL ROBERTS, M.D.
PANAMA CITY

With the economic, social, political, professional and even the religious aspect of the nation undergoing a metamorphosis rapidly, and the foci of cause and events being centered around the public welfare, it seems that exploitation rather than conservatism is the trend. Today, the public seems to be howling for what it wants. The general attitude is to give the people what they want or what they howl for, but members of the medical profession are fairly certain that from a medical and surgical standpoint, in most cases, they do not know what they want. Nevertheless they continue to howl. If they howl long enough and loud enough, they bring pressure to bear and in the course of events get results. Some regard the results as good, others as bad, according to personal opinion.

Not so long ago measures of birth control were talked of in whispers, and to exploit contraceptive measures was considered illegal and unethical; but the public began to howl, and as a result these measures are now fairly well accepted and advocated by the profession. Personally I am unbiased with reference to birth control and contraceptives, but will the advocacy of these measures influence the incidence of abortion in the event of their failure of purpose? I think it will. Statistics now prove that the incidence of induced abortion is on the increase. I am afraid that the acceptance and advocacy of contraceptives, by virtue of their failure to prevent conception, will cause the people to howl again and bring pressure on physicians to increase further the number of induced abortions, for contraceptive measures are by no means yet perfected.

The ethical grip on the profession and the professional grip on society are both gradually being relaxed. I am of the opinion that in the near future physicians will, in consequence, be called on to handle more inevitable and incomplete abortions than in the past. At least, I do not think the incidence of abortion will decrease. These thoughts, based entirely on per-

Read before the Fifth Annual Meeting of the North Central Medical District, Gainesville, Oct. 3, 1941.

sonal opinion, are the inspiration for this plea, made in the hope that it may arouse in the profession a conscientious endeavor to be of the best service to the unfortunate, or if one pleases, fortunate patients who undergo abortion. I perhaps shall not offer anything new, but I will not apologize for I agree with Sir William Osler, who once said: "There are only three ways to learn medicine. They are: repetition, repetition and repetition."

In the practice of medicine abortion is frequently encountered. It is capable of taxing medical and surgical judgment and skill to the utmost. It is the one condition that physicians are changeable about when it comes to therapeutic procedure. There are two main types of treatment, the surgically active and the medically expectant, and each year there are converts to both types. Perhaps the most convincing and converting influence is personal experiences or the teaching efforts of one's professors and clinicians. Statistics bear out the fact that the results of the two schools of opinion on treatment are about the same. The consensus, therefore, is that a combination of active and expectant treatment is to be preferred, with the course of events determining the decision as to the application.

Both active and expectant treatment should be applied with conservatism. To adhere routinely to either type of treatment I should consider radical, for both types have their virtues and shortcomings. To practice both forms of treatment with discrimination, caution and a thorough knowledge of their limitations is what I term conservative treatment. I do not wish to convey the impression that in my opinion conservative treatment consists of total abstinence from any form of active interference, for oftentimes interference is the acme of conservative treatment. No one would deny that to remove gently and carefully secundines hanging from the cervix or retained in the vagina would be a violation of conservative management, but this procedure would only be aiding the results of expectant or medical treatment. My plea is that one treat cases expectantly in these circumstances, terminating them physiologically or pharmacologically, and resorting to active or surgical measures only in the extreme cases and in those that have proved unresponsive to medical measures. If this practice is followed routinely, I am sure the morbidity and mortality rate in this section of the nation will be greatly reduced. Too many

cases of abortion are treated by the untrained and unskilled, to say nothing of the environment in which the patients in these cases are operated upon.

The causes of abortion are many. The etiology varies from the sublime to the ridiculous. Accurate determination of the cause of an abortion has great bearing on the method or procedure of treatment. Every effort should be made to learn the cause of the termination of the pregnancy. At the outset one should determine whether he is dealing with an infectious process or its potentialities. If the cause happens to be of a criminal nature or if the condition arises from septic processes in the body, the possibility of infection complicating the situation is great. In cases of inevitable or incomplete abortion one deals either with an infectious or a noninfectious process, and the two cannot be differentiated as early as one would like. It is necessary then to draw on the imagination and play hunches according to the history.

Most physicians agree that the hands off policy or expectant treatment is proper in the face of an infectious process. Infection in puerperal conditions may be well established before the physician is able to detect its presence as in most instances the patient is not under constant observation. Even in cases closely observed, infection has already begun when indications such as fever, a chill and leukocytosis present themselves. In such cases it is well to refrain from active treatment lest one unknowingly add insult to injury. In the presence of a foreign body, and especially of a septic condition of the uterus, the defensive mechanism of the body immediately lays down a protective wall of white blood cells under the endometrium. None but the most virulent organisms penetrate this wall. Saprogenic organisms do not pierce it, but if it is penetrated by a curet or by forcefully detaching secundines, then a direct avenue is made available to the deeper structures, and one may be relatively sure that pathogenic organisms will tread it.

To arrest acute, profuse and persistent hemorrhage and to rid the uterus of fertile mediums for the growth of bacteria constitute the real scientific reasons for the active or surgical evacuation of the uterus in abortion. At the present time many more pseudoreasons are being advocated and practiced. Economy, both as to time and money, emotional pressure and many social fancies or obligations are reasons, perhaps,

that are forcing or influencing the trend for active interference in the management of the inevitable and incomplete abortion, but when active treatment is practiced for reasons other than strictly scientific ones, there is bound to be associated with it quite a bit of hopeful procrastination and uncertainty with reference to confidence in arriving at the proper or desired end result. Hasty dilatation and curettage of the uterus during the puerperal period should therefore be frowned upon. Too many times instrumental evacuation or debridement is performed for economic, professional and perhaps social reasons. I admit there is a tremendous urge or temptation to resort to dilatation and curettage in most cases that come under one's professional care, especially in the case that has been referred for treatment. This urge or temptation occurs, perhaps, for many reasons, such as the demand by the ones concerned for the physician to do something, the fact that he is able to perform an operation his colleague could not, as evidenced by the case having been referred to him, his consideration of the economic and financial status of the patient, his desire to get the job done with the minimum expenditure of time and money and, on the other hand, a suggestion offered, with apologies, his effort to have something to show for the fee charged. But, if conscientious and scientific indications are not satisfied, I urge thoughtful and careful procedure for it is better to waste, or use, a few more hospital days than it is to suffer many regrets. As far as the fee is concerned, it is well to remember that in the majority of cases the physician is paid for what he knows rather than for what he does.

Few authorities argue against the hands off policy in septic conditions of the uterus. The reasons are that nature is better qualified to handle the situation, and to stir up the infection and scatter it by active interference is too often detrimental. Then why should nature be denied the same opportunity when it does not have pathogenic organisms to cope with? Surely nature performs its duty better physiologically and preserves the uterus better anatomically if it is not burdened with annoyances of pathologic and mechanical origin. With a septic condition present in the uterus, one should at least delay any active treatment until the infection is quiescent. Some physicians, however, advocate the active emptying of the uterus in the face of septic processes because they believe the normal physiologic

uterine contractions will force bacteria into the endometrium, the deeper structures and the sinuses when the secundines are detached. This conclusion may be true in some instances, but when nature clips the secundines from the endometrium, it backs its activity with a protective wall of leukocytes, and the uterine contractions tend to close up the underlying sinuses. But when the curet clips the secundines away, it also clips away the protective mechanism and tends to open up avenues into the deeper structures. It is much better to take the chance of an indirect inoculation into the adjacent structures by a failure of nature rather than to risk a direct one by the curet. Nature can draw a line of demarkation and differentiate dead or unhealthy from live and healthy tissue in the uterus, but I dare say the user of the curet does not possess this ability.

Hemorrhage to the extent that warrants curettage is rare. The persistent blood-stained leukorrhea following an abortion is to my mind not an indication for the use of the curet, even though the lochia be foul-smelling and sapremic in character. This is the type of case in which the uterus is usually subjected to dilatation and curettage. In the majority of the cases in which the oozing of blood and foul-smelling leukorrhea occur, the condition results from the retention of a small portion of the secundines that is infested with nonpathogenic saprophytic organisms. This retained part of the secundines usually is expelled as soon as enough slough takes place to detach it from the endometrium, even though the process continues until the slough and hemorrhagic discharge incident to the next period of menstruation occur. Menstruation is reestablished in most cases a few weeks after the abortion. This conservative treatment also includes combating the secondary anemia that may be apparent, informing the patient of what is taking place and encouraging confidence. This process is worth waiting for as disappointment is seldom experienced.

By virtue of my geographic location and because I practice in a resort town where there are many transients, I do not hesitate to state that it falls to my lot to treat an appreciable number of cases of incomplete and inevitable abortion criminally induced, either by the first or second party. Holding the opinion that to a certain extent in all such inductions infection is already present, or at least potentially so, I have with but few exceptions terminated them successfully with medical measures, resorting in the exceptional case

to gloved finger curettage or debridement with the ring-tipped sponge forceps.

In treating the inevitable or incomplete abortion of criminal etiology, were I to betray my convictions and do a hurried curettage to satisfy the ones concerned instead of first exhausting the measures of expectant treatment, and should the results be disastrous, a hard question for me to answer would be, "Just who was the criminal?"

Some authorities prefer the sharp curet in these cases, but I would not put a sharp curet into the uterus during the puerperal period for anything, regardless of who the authority is. The dangers and effects of curettage at this time are manifold, whereas those of expectant or medical termination of an abortion are few.

Since statistics prove that the end result of active and expectant treatment is about the same, it is difficult to draw a helpful conclusion. The majority of the statistics are, however, compiled from records of cases observed in hospitals and clinics where knowledge, skill and suitable environment are at hand. What would be the conclusion if every physician who treats cases of abortion were to alternate his procedure of treatment? I am sure the score would be in favor of the expectant or medical treatment. Statistics have proved to me one thing. The general practitioner is as competent to treat successfully the inevitable and incomplete abortion as is the highly trained specialist, so long as he possesses a knowledge of the fundamentals of the mechanism of abortion and its pathologic physiology.

Strictly speaking, as soon as an abortion becomes inevitable, one is then dealing with an incomplete abortion, for the expulsion of the entire contents of the uterus is the result to be obtained. Most spontaneous abortions complete themselves spontaneously, but among those classified as incomplete it is usually the ones that have been induced that become arrested and give the patient as well as the doctor the most concern.

With the exception of supporting and bacteriostatic measures, the expectant treatment of clean and septic cases is about the same. Quinine and ergot preparations are the best aids as both are credited with inducing bacteriostatic as well as oxytocic action. The contribution of the aniline dyes and the sulfonamide group of drugs is a recent adjunct to the conservative treatment. I do not believe quinine and ergot should be given prematurely, or before uterine contractions

have begun, because the response of the uterus will not be the best. It is better to place an ice cap on the lower portion of the abdomen and keep it there until contractions have begun before administering an oxytocic. In most cases, however, the patient is not seen until uterine contractions have become well established as relief is usually sought only after pain or hemorrhage is pronounced. In cases of hemorrhage without pain, as in placenta previa, the vagina may have to be packed, and medication may be required to usher in and stimulate contractions. If the contractions are adequate, no medication is necessary to stimulate them further. Contractions must, however, be maintained if dilatation of the cervix and expulsion of the contents are to be accomplished. The ice cap applied to the lower part of the abdomen aids in maintaining the contractions, and along with application of the ice cap quinine and ergot may be given. I usually give 5 grains of quinine and a teaspoonful of fluid extract of ergot at intervals of from two to four hours, the amount and frequency of the dose varying with the response of the uterus. Occasionally I resort to pituitrin, 1/2 to 1 cc. at intervals of from four to six hours until from six to ten doses have been administered, if necessary. Pituitrin is usually given after contractions have been going on for some time, as it is used to bring about expulsive contractions rather than placental separation. As long as contractions persist, progress is evident. No examinations are made other than close inspection. When contractions have slowed down or stopped, as evidenced by cessation of pains without expulsion of the contents although enough time has elapsed, a careful aseptic inspection of the vaginal vault and cervix should be made, either with the speculum or the finger. It is surprising how many times one finds the expected contents either in the vagina or hanging from the cervix. After gentle removal, postpartum care applicable to the case should be instituted.

119 Cove Blvd.

PLAN NOW TO ATTEND

the next

STATE MEDICAL CONVENTION

Palm Beach . . . April 13, 14, 15, 1942

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., President.....Miami
GILBERT S. OSINCUP, M.D., President-Elect.....Orlando
LUTHER W. HOLLOWAY, M.D., 1st Vice-Pres.....Jacksonville
FREDERICK K. HERPEL, M.D., 2nd Vice-Pres., IV. Palm Bch.
WALTER C. PAYNE, M.D., 3rd Vice-Pres.....Pensacola
SHALER RICHARDSON, M.D., Sec'y-Treas.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., Chm., "C," '44.....Jacksonville
J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43.....IV. Palm Beach
WALTER C. PAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D., (Ex-Officio).....Jacksonville
SHALER RICHARDSON, M.D., (Ex-Officio).....Jacksonville
STEWART G. THOMPSON, D.P.H. (Advisory).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., Chairman, "C," '43.....St. Augustine
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
HOMER L. PEARSON, M.D., "F," '44.....Miami
JAMES H. FOUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAIK, M.D., Chm., "C," '43.....Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MCCONNELL, M.D., "D," '42.....St. Petersburg
BRUCEY M. RHODES, M.D., "A," '42.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami
WALTER C. JONES, M.D., (Ex-Officio).....Miami
SHALER RICHARDSON, M.D., (Ex-Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., Chm., "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
J. N. McLANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Orlando

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., Chm., "C," '42.....Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., Chairman, "F," '42.....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm., "C," '42.....Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43.....IV. Palm Beach
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chairman, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R. W. S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., Chm., "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '43.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm., "C," '42.....Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm., "F," '44.....Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., Chairman, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. MCEWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYSENBUG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., Chm., "E," '44.....Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., Chm., "F," '42.....IV. Palm Bch.
LAURIE L. DOYIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARDLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., Chm., "F," '44.....Coral Gables
THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
EUGENE G. PECK, M.D., "B," '42.....Ocala
COUNCILL C. RUDOLPH, M.D., "D," '42.....St. Petersburg
WILLIAM F. SINCLAIR, M.D., "E," '44.....Orlando
ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., Chm., "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

Twelfth—W. DUNCAN OWENS, M.D., Chm., '43 Miami Bch.
First—WILLIAM C. ROBERTS, M.D., '42.....Panama City
Second—C. D. WHITAKER, M.D., '43.....Marianna
Third—J. M. PRICE, M.D., '43.....Live Oak
Fourth—ALVA T. COPE, M.D., '42.....Gainesville
Fifth—LUCIEN Y. DYVENFORTH, M.D., '43.....Jacksonville
Sixth—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
Seventh—JOHN R. BOLING, M.D., '43.....Tampa
Eighth—HOWARD V. WEEMS, M.D., '42.....Sebring
Ninth—CARL D. HOFFMANN, M.D., '42.....Orlando
Tenth—E. B. HARDEE, M.D., '43.....Vero Beach
Eleventh—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., Chairman, "A," '43.....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFRO DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. PAULLIN, M.D., (A.M.A. Ex-Officio).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate.....West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., Chairman, 1919.....Jacksonville
W. HENRY SPIERS, M.D., Secretary, 1938.....Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902.....Pensacola
HENRY E. PALMER, M.D., 1909.....Tallahassee
ROBERT H. MCGINNIS, M.D., 1915.....Jacksonville
FREDERICK J. WALTER, M.D., 1918.....San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....Tampa
H. MARSHALL TAYLOR, M.D., 1923.....Jacksonville
JOHN C. VINSON, M.D., 1924.....Tampa
JOHN S. MCEWAN, M.D., 1925.....Orlando
H. MASON SMITH, M.D., 1926.....Tampa
JOHN A. SIMMONS, M.D., 1927.....Arcadia
FREDERICK J. WAAS, M.D., 1928.....Jacksonville
HENRY C. DOZIER, M.D., 1929.....Ocala
JULIUS C. DAVIS, M.D., 1930.....Quincy
GERRY R. HOLDEN, M.D., 1932.....Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....Tampa
HOMER L. PEARSON, M.D., 1934.....Miami
HERBERT L. BRYANS, M.D., 1935.....Pensacola
ORION O. FEASTER, M.D., 1936.....St. Petersburg
EDWARD JELKS, M.D., 1937.....Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....Century

The Journal of The Florida Medical Association

Owned and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D. *Orlando*
FRANK C. METZGER, M.D. *Tampa*
HOMER L. PEARSON, M.D. *Miami*
J. H. POUND, M.D. *Tallahassee*
W. McL. SHAW, M.D. *Jacksonville*

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., Chairman *Miami*
SHALER RICHARDSON, M.D. *Jacksonville*
HERMAN WATSON, M.D. *Lakeland*

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman *Jacksonville*
THEODORE F. HAHN, M.D. *Deland*
COUNCIL C. RUDOLPH, M.D. *St. Petersburg*

JOURNAL CHANGES

From year to year changes have been instituted in the Journal in an effort to enhance its value. For instance, several years ago the Abstract Department made its appearance. This column contains abstracts of articles by our members which have been published in other Journals. The "Books Received" column was later added in which appears short reviews of new books.

A specialist was engaged about a year ago who edits original articles after they have been approved by the Committee on Publication; papers are carefully checked in accordance with accepted rules for medical writing. A great improvement both in appearance and readability has recently been effected by the adoption of a more modern style of type.

As is immediately apparent, this month further changes have been made, which we hope will have the approval of our members. Not only has the format been modernized, but color has been added, a fact which has been taken advantage of by Petrogalar Laboratories, John Wyeth and Brother, Mead Johnson and Company, Eli Lilly and Company, and other advertisers.

Members are urged to submit new and original material for publication. After all, no matter how attractive your Journal is made, its real value will be measured by the quality of the articles in its scientific section.

PREVENTION OF BLINDNESS

In 1941 Florida became the forty-seventh state to require by law the administration of silver nitrate or other approved prophylactic by those in attendance at childbirth, for the purpose of preventing ophthalmia neonatorum. The adequacy of this law will depend upon how completely its provisions are carried out. It is clearly the duty of medical societies, public health officials, as well as obstetricians and others in attendance at childbirth to work diligently toward this end.

In 1890, about ten years after Credé's discovery of the efficacy of silver nitrate as a prophylactic to prevent ophthalmia neonatorum, New York state passed the first law relating to the prevention of blindness from this cause. The law did not mention the use of a prophylactic but required only that midwives, nurses and others report suspected cases to the health officer or to a legally qualified physician. It was not until the appointment of a special committee by the American Medical Association in 1906 and the organization in 1908 of the New York State Committee for the Prevention of Blindness, which later became the National Society for the Prevention of Blindness, that public opinion was aroused to the support of legislation requiring the use of a prophylactic in the eyes of all newborn infants.

The Florida law was formulated cooperatively by the Florida Medical Association and the State Board of Health, who incorporated in it suggestions made by the National Society for the Prevention of Blindness as well as by local groups in Florida interested in this problem. Enactment of such legislation was approved at the Convention of the Florida Medical Association in April 1941.

The law went into effect September 5, 1941. It is now mandatory for every physician, midwife or other person who may be in attendance at childbirth to instill or cause to be instilled into the eyes of the infant, within one hour after birth, a fresh solution of 1 per cent silver nitrate or some other equally effective prophylactic approved by the State Board of Health. The date of manufacture must be marked on the container of the prophylactic. Silver nitrate in 1 per cent solution is furnished free by the State Board of Health to private physicians, hospitals and County Health Units.

Prophylactics approved by the State Board of Health for instillation in infants' eyes are:

1	per cent	Silver Nitrate	
5	" "	Argentum Protenicum Forte, U.S.P. XI	(Example, Protargol)
25	" "	" " " "	Mite, U. S. P. XI
			(Example, Argyrol)

A list of the approved prophylactics with printed instructions for administration, prepared in consultation with the Florida Medical Association, is being sent by the State Board of Health to all physicians and other persons who may lawfully attend mothers in childbirth. These instructions should be posted in delivery and operating rooms of all hospitals in the State in order that uniform methods may be employed. Duplicate copies of the instructions are available from the State Board of Health or County Health Units.

The fact that a prophylactic has been administered, the time of administration following delivery and the type of prophylactic used, must be recorded on the reverse side of each birth certificate in a space provided for this purpose. Parents with religious beliefs that cause them to object to the use of drugs are exempt from the law providing they file a written objection with the physician, midwife or other person in attendance at the birth of their child. This written objection must be attached to the birth certificate.

Because the new law is not yet thoroughly understood throughout the State, some of its provisions, particularly the one requiring that a record be made on the birth certificate of the instillation of a prophylactic, have not been observed as carefully as they undoubtedly will be when those affected by the law become more familiar with its provisions. Thirty-one per cent of the birth certificates received by the Bureau of Vital Statistics, State Board of Health, for the period from September 5 through September 30 did not indicate whether a prophylactic had been used at birth. Of the 1,923 certificates submitted by physicians, 640, or 33.3 per cent, were incomplete in this respect, and of the 599 submitted by midwives, 142, or 23.7 per cent, were incomplete. The cooperation of physicians is asked in completing birth certificates so that it will not be necessary for the Bureau of Vital Statistics to return them for additional information.

The law further provides that "any persons who shall nurse or attend any infant shall re-

port any inflammation or unnatural discharge in the eyes of the child that may develop within two weeks after birth." The report must be made to a local health officer or a licensed physician within six hours.

The law carries with it a penalty of \$100 fine for failure to comply with its provisions. Copies of the law were mailed by the State Board of Health on August 15, 1941, to all physicians and others lawfully licensed to attend mothers at childbirth in this State.

In considering the possibility of infection occurring in the eyes of the newborn infant, it is well to remember that if silver nitrate is used under ideal conditions, only an occasional case of gonorrheal ophthalmia will occur. The National Society for the Prevention of Blindness has made it a practice to collect annually data on the number of new pupils entering the schools for the blind in the United States. Although their findings can be considered only as an index, owing to the fact that children enter school six or seven years after the occurrence of blindness, they are used to check the success of the program for the control of ophthalmia neonatorum.

During the first year in which records were kept, 1906 to 1907, ophthalmia neonatorum accounted for 28.2 per cent of blindness. At that time no state required the use of a prophylactic in the eyes of newborn infants. By the end of 1911, 3 states required the administration of a prophylactic, and the percentage had dropped to 22.8. By the end of 1922, 33 states had passed prophylactic laws, and the five-year average of blindness from this cause had dropped to 16.6 per cent. The last five-year average, ending in 1937, was 7.0 per cent; 43 states then required the use of a prophylactic. The percentage for the year 1940 was also 7.0.

This reduction cannot be attributed to any single factor, since it is the result of education, legislation and adequate enforcement. Nevertheless, it is reasonable to conclude that the widespread use of an adequate prophylactic is largely responsible for the pronounced reduction in the particular group studied.

Ophthalmologists have for a number of years been interested in reducing the incidence of ophthalmia neonatorum, and have been instrumental in formulating local and national programs of control. The success of the Florida law will depend upon the cooperation of physicians and others in attendance at childbirth.

A CALL TO THE MEDICAL PROFESSION

The nation is at war. The Congress has passed an amendment to the Selective Service Act which will call for registration of every man up to the age of 65 and which will place all men under 45 years of age subject to service at the order of the Selective Service boards.

The Procurement and Assignment Service for Physicians, Dentists and Veterinarians was established by order of the President on October 30. Thus the medical profession itself aids in determining proper distribution of the medical profession in supplying the needs of the armed forces and maintaining medical service to civilian communities, public health agencies, industrial plants and other important needs.

At a meeting of the Procurement and Assignment Service held in Chicago at the headquarters of the American Medical Association of December 18, jointly with the Committees of Medical Preparedness of the American Medical Association, the American Dental Association and the American Veterinary Medical Association, plans were drawn for making immediately available to the United States Army and Navy Medical Corps the names of physicians who wish to be enrolled promptly in the service of the government in this emergency.

On the next page is published a sample blank by which every physician may at once place his name with the Procurement and Assignment Service as one who is ready to serve the nation as the need arises. If you wish to make yourself available for classification, write a similar letter at once to Dr. Sam F. Seeley, Executive Director of the Procurement and Assignment Service. When these blanks are received, they will be classified and checked with the information available in the national roster of physicians at the headquarters of the American Medical Association.

For two thousand and nine counties in the United States, lists have been prepared indicating physicians who are engaged in necessary civilian projects, public health services or educational activities from which they cannot be spared. Shortly the rest of the counties will have such lists available.

In each of the corps areas covering the United States a committee is being established, including representatives of medical, hospital, educational, dental and veterinary activities. In the

individual states, committees of medical, dental and veterinarian professions are being established through which the corps area committees will exercise their functions. In each county also local committees will provide accurate information regarding the status of each member of the profession concerned.

The raising of the Selective Service age from 28 to 45 will place a great number of additional physicians in the category of those on whom the nation may call as their services are needed. Estimates indicate that some sixty thousand physicians thus become available for service and that forty-two thousand dentists under the age of 45 also become subject to call. By enrolling with the Procurement and Assignment Service immediately, utilizing the blank on the next page, all physicians, but particularly those under 45 years of age, insure to every extent possible assignment to the type of service for which they are best fitted. They avoid thus also the possibility of unclassified service with the United States Army during the period that may be necessary following selection by the Selective Service before the commission can be secured. A physician called by the Selective Service who has not enrolled or who is not on a reserve list obviously serves without a commission during the time that necessarily elapses before a commission is secured. In future issues of The Journal announcements will be made regularly of the numbers of those who enroll and of the extent to which the immediate needs of the Army, Navy and other government agencies are being supplied.

EXAMINATIONS IN BASIC SCIENCES

The Florida Board of Examiners in the Basic Sciences will hold its next examinations Monday, June 8, 1942 at the University of Florida, Gainesville.

All requests for application blanks should be sent to Dr. John F. Conn, Secretary, John B. Stetson University, Deland, Florida.

ENROLLMENT FORM FOR PROCUREMENT AND ASSIGNMENT SERVICE FOR PHYSICIANS

Dr. Sam F. Seeley, Executive Officer
Procurement and Assignment Service
New Social Security Building
4th and C Streets S. W.
Washington, D. C.

Dear Doctor Seeley:

Please enroll my name as a physician ready to give service in the Army or Navy of the United States when needed in the current emergency. I will apply to the Corps Area commander in my area when notified by your office of the desirability of such application.

Signed

1. Give your name in full, including your full middle name:
2. The date of your birth:
3. The place of your birth:
4. Are you married or single?
5. Have you any children? If so, how many?
6. Do you believe yourself to be physically fit and able to meet the physical standards for the Army and Navy Medical Corps?
7. Have you filled out previously the questionnaire sent to all physicians by the American Medical Association?
8. When and where were you graduated in medicine?
9. In what state are you licensed to practice?
10. Do you now hold any position which might be considered essential to the maintenance of the civilian medical needs of your community? If so, state these appointments:
11. Have you previously applied for entry into the Army or Navy Medical Service? If so, state when, where and with what result (if rejected, state why).

Signature

Address

Date

A. M. A. BROADCASTS

Doctors at Work, the dramatized series of radio programs broadcast by the American Medical Association and the National Broadcasting Company went on the air for its second season on December 6, from 5:30 to 6:00 p.m., Eastern Standard time. The programs will be broadcast weekly on upwards of 75 stations affiliated with the Red Network of the National Broadcasting Company and will be heard from coast to coast.

Doctors at Work, a successful, serialized story broadcast, last year dealt with the experiences of a fictitious but typical American boy choosing medicine for his vocation and proceeding to acquire the necessary education and hospital training for the private practice of medi-

cine. Interwoven with the personal story of young Doctor Tom Riggs and his fiancée, Alice Adams, was the romance of modern medicine and how it benefits the doctor's patients.

The new series of broadcasts will resume where last year's story left off, namely, with the marriage of Tom Riggs and Alice Adams, and the subsequent life of a young doctor and his wife in time of National Emergency in a typical, medium-sized, American city.

The program will be produced under the supervision of the Bureau of Health Education, of the American Medical Association, W. W. Bauer, M. D., director. Scripts will be by William J. Murphy of the National Broadcasting Company, author of such successful radio productions as "Flying Time," "Cameos of New Orleans," "Your Health," "Medicine in the News" and last year's "Doctors at Work." The scripts will again be produced by J. Clinton Stanley and the National Broadcasting Company orchestra will be under the direction of Joseph Gallichio as heretofore. Actors will be drawn from the well-known group of Chicago radio actors previously heard in American Medical Association and other successful broadcasts.

The program will be available to all stations affiliated with the Red Network of the National Broadcasting Company. Announcements should be sought in local newspaper radio columns under the title "Doctors at Work" or possibly "American Medical Association" or in some instances, "Health Broadcasts." Evidence of local interest in the program may be the determining factor in whether a local station takes this educational, sustaining feature or sells its time to a local, revenue producing program.

VIOLATIONS OF MEDICAL PRACTICE ACT

We have been informed that:

Joseph R. Lyons, alias Dr. Lyons, alias The Prophet, Port St. Joe, was convicted for violation of the Medical Practice Act, and sentenced to serve a term of five years in the state penitentiary at Raiford.

Herbert C. Tucker, Sarasota, was convicted for practicing medicine without a license and sentenced to serve three months in the county jail.

Maggie Austin was convicted of practicing medicine without a license and fined \$25.00.



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

Individualize

YOUR RECEPTION ROOM

The most Direct Way to do this is by

WATER COLOR OR OIL PAINTINGS

MURALS

WALL OR CEILING DECORATIONS

HAROLD HILTON = = *Arlington, Florida*

President, Florida Water Color Society; past president, Florida Federation of Art. Among Florida commissions: ceiling decorations, Banking Rooms, duPont Building, Miami; murals and painting on glass, Auditorium, George Washington Hotel, Jacksonville; paintings on glass, Cock-tail Lounge, LaConcha Hotel, Key West; murals, Indian Room, Seminole Hotel, Jacksonville.

CONVENTION PRESS



Serving the Medical Profession

IT IS OUR PRIVILEGE TO PRINT THE JOURNAL
OF THE MEDICAL ASSOCIATION OF FLORIDA

218 WEST CHURCH STREET

JACKSONVILLE

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

ANNUAL REGISTRATION

Every practitioner of medicine and surgery holding a license to practice in Florida is required by law to register annually on or before January 1 with the secretary of the State Board of Health and at that time to pay a fee of \$1.00. A licentiate failing to register annually is liable to a fine of not more than \$50.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. Leo M. Wachtel, Jr. of Jacksonville announce the birth of a son, Leo Michael, III, on December 11.

MARRIAGES

Dr. Robert E. Blount of Ft. Lauderdale and Miss Mary Allen Hooper of Howiston, Va., were married October 20.

Dr. L. W. Dowlen and Miss Marie Louise Smith of Miami were married on November 18.

Dr. Bert H. Malone of Jacksonville and Miss Violet Adelaide Glascock of Waycross, Ga., were married December 14.

DEATHS

Dr. Mitchell L. Moran of St. Petersburg died on November 22.

Dr. Kenneth R. Bell of Sanford died on December 4 in Camp Claiborne, La.

Dr. John H. Mills of Tampa died on December 21.

Dr. B. E. Miller of New Smyrna Beach died on December 21.

STATE NEWS ITEMS

The regular quarterly meeting of the Florida Society of Dermatology and Syphilology was held in Miami, November 23. A clinic was held at the Dade County Court House and at the Dade County Hospital. Many instructive cases were seen. The highlight of the clinic was a demonstration of the five-day antisyphilitic treatment. The discussion that followed was enthusiastic and was participated in freely by the guests who were present. The next quarterly meeting will be held in Tampa, with Dr. Chadbourne A. Andrews acting as chairman.

Florida doctors who attended the meeting of the Southern Surgical Association in Pinehurst, N. C., December 9 to 11, were: Gerry R. Holden, Kenneth A. Morris, Harry A. Peyton, Jacksonville; Walter C. Jones, Thomas O. Otto, John W. Snyder, Joseph S. Stewart, Miami; Elmer H. Adkins, George D. Lilly, Miami Beach; John R. Boling, Tampa.

Dr. George M. Dawson of West Palm Beach returned the latter part of November from a ten-weeks' postgraduate course taken at the Cook County Hospital, Chicago.

Dr. Marvin Smith announces the removal of his offices from the Huntington Building to his new Clinic Building at 800 S. W. Nineteenth Ave., Miami. His new location provides increased facilities for the diagnosis and treatment of gastrointestinal and rectal diseases.

At the call of Dr. Lloyd J. Netto, general chairman of the local committee on arrangements for the next annual convention, a meeting of the Cabinet Committee was held on Thursday evening, December 11. Each member of the Cabinet Committee is chairman of a local committee and at this meeting the duties and responsibilities of each committee were discussed. It was an enthusiastic meeting, with 100 per cent of the cabinet members present. Those who attended were Drs. Netto, Harry A. Wakefield, Roy O. Cooley, Gaylord Lewis, Guy W. Heath, George M. Dawson, J. R. Sory, William M. Blair, V. M. Johnson, F. K. Herpel, W. E. Van Landingham, O. B. Hazen, W. E. Bippus, V. D. Stone, and Stewart Thompson, managing director of the State Association.

KENNETH RUSH BELL

Dr. Kenneth R. Bell, practicing physician and surgeon of Sanford since August, 1939, died suddenly on December 7 in Camp Claiborne, La. At the time of his death he was serving as a captain in the Reserve Corps and was assistant chief of surgery at the Station Hospital.

Dr. Bell was born on July 9, 1902, in Sanford, where for many years his father was minister of the Methodist Church. Following college work at Southern College in Clearwater Beach, he studied medicine at Emory University in Atlanta, from which he was graduated in 1928 as an honor student. He was a member of the Sigma Chi social fraternity and the Alpha Kappa Kappa medical fraternity. He served as intern at Emory Hospital in Atlanta for one year, at the Presbyterian Hospital in Chicago for one year and at Barnes Hospital in St. Louis, where he was

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE

Florida Medical Ass'n Convention
APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

The S.M.A. Corporation **ANNOUNCES**

Biotin

METHYL ESTER
($C_{11}H_{18}N_2O_3S$)



Previously Unavailable Factor of the **B-COMPLEX**

• Crystalline Biotin methyl ester, isolated and purified in our laboratories, is now ready for distribution in limited quantities for research purposes. This previously unavailable factor of the vitamin B complex is offered as a solution quantitatively prepared from crystalline biotin methyl ester and as such is suitable for standardization procedures. It is not available in dosage form, but is supplied in 1 cc. ampules, each containing 25 micrograms, for investigational use only.

A review of the literature on Biotin, prepared by our technical staff, is available in booklet form to those interested in nutritional research.

Inquiries should be addressed to

RESEARCH LABORATORIES
S.M.A. CORPORATION, CHAGRIN FALLS, OHIO

S. M. A. CORPORATION • CHICAGO • ILLINOIS

PRODUCERS OF S-M-A
(FOR INFANTS DEPRIVED OF BREAST MILK) and

Nutritional  *Biochemicals*

REG. U.S. PAT. OFF.

HILLSBOROUGH

At the election of officers, held by the Hillsborough County Medical Society on December 2, the following were named to head the Society for the coming year: president, Dr. Blackburn W. Lowry, Tampa; vice president, Dr. T. C. Maguire, Plant City; secretary-treasurer, Dr. James S. Grable, Tampa. The following delegates were chosen to represent the society at the next annual meeting of the State Association: Drs. S. B. Forbes, John S. Helms, Jr., John R. Boling, J. C. Pate, and William M. Rowlett.

JACKSON

Dr. W. R. Wandeck of Marianna was chosen president of the Jackson County Medical Society at a meeting held in December. The other officers of the Society are: Dr. C. H. Ryals, Grand Ridge, vice president, and Dr. R. N. Joyner, Marianna, secretary-treasurer. Dr. C. D. Whitaker of Marianna was elected delegate to the State Association convention.

PASCO-HERNANDO-CITRUS

Dr. Claude L. Carter entertained the Pasco-Hernando-Citrus County Medical Society at the Orange Hotel in Inverness, Thursday evening, November 20. A turkey dinner was enjoyed at the hotel, after which the members went to Dr. Carter's home where interesting clinical cases were reported and discussed. Dr. W. B. Moon, president, presided.

Dr. William H. Walters entertained the Society at his home in Lacoochee on December 11. Following a quail and baked ham dinner, the regular meeting was held. Minutes of the last meeting were read and approved. The secretary-treasurer then read his annual report which was approved. Clinical cases reported by Drs. Bradshaw, Walters, and Young were discussed by all present.

An election of officers for 1942 was held, which resulted as follows: Dr. J. T. Bradshaw, San Antonio, president; Dr. H. Durham Young, Bushnell, first vice president; Dr. C. L. Carter, Inverness, second vice president, and Dr. G. R. Creekmore, Brooksville, secretary-treasurer. Dr. W. B. Moon of Crystal River was elected delegate to the State Medical Convention with Dr. J. T. Bradshaw as alternate delegate.

Dr. Stanley T. Simmons of Dade City invited the Society to meet with him on January 8.

... in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928



REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Four
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, starting January 12th and every two weeks thereafter. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course will be offered starting June 1st. Two Weeks Course in Gastro-Enterology will be offered starting June 15th. One Month Course in Electrocardiography and Heart Disease every month, except December and August.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting March 9th. Informal Course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting April 20th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered starting April 20th. Five Weeks Course in Refraction Methods starting March 9th. Informal Course every week.

ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honoré Street, Chicago, Ill.



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and those suffering from ARTHRITIS also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoye, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

B. MARIAN BEALS
President-Treasurer

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

PINELLAS

On December 5 the Pinellas County Medical Society held a dinner meeting at the Shrine Club, St. Petersburg. The scientific program consisted of the following papers: "Treatment of Dysmenorrhea" by Dr. A. R. Frederick, and "Postpartum Hemorrhage" by Dr. R. K. O'Brien.

On the third Friday of each month the Society holds a round table discussion at the home of one of its members. On December 19 Dr. James A. Bradley was host, and acted as moderator.

POLK

The members of the Polk County Medical Society elected Dr. James R. Boulware of Lakeland as president, at a meeting held on December 10. Other officers elected were: Dr. Bruce R. Tinkler, Lake Wales, vice president; Dr. Edgar Watson, Lakeland, secretary-treasurer, and Dr. W. W. Shafer, Haines City, censor. Drs. Boulware, Herman Watson, and R. L. Cline, all of Lakeland, were named delegates to the State Association, with Drs. R. H. Mooty, Winter Haven; J. L. Hargrove, Bartow, and John F. Wilson, Lakeland, as alternates.

WALTON-OKALOOSA

The Walton-Okaloosa County Medical Society held its regular meeting at DeFuniak Springs on November 20, with Dr. R. B. Spires as host at the Lakeside Clinic. Dr. Spires presented two motion pictures, "Anesthesia in Obstetrics" and "Collapse Therapy in Tuberculosis." Dr. E. F. Hoffman, director of the local Health Unit, was the speaker of the evening, and gave an interesting talk on "How to Raise the Level of Health Standards."

Those present were Dr. A. G. Williams, president, Lakewood; Dr. R. B. Spires, secretary; Dr. Rhett E. Enzor, Crestview; Dr. S. E. Stevens, Laurel Hill; Dr. C. W. McDonald, Marianna, and Dr. E. F. Hoffman, DeFuniak Springs.

ADVERTISERS' NOTES

"IS THIS PRODUCT COUNCIL-ACCEPTED?"

This is the first question many physicians ask the detail man, when a new product is presented.

If the detail man answers, "No," the physician saves time by saying, "Come around again when the Council accepts your product."

If the detail man answers, "Yes," the physician knows that the composition of the product has been carefully verified, and that members of the Council have scrutinized the label, weighed the evidence, checked the claims, and agreed that the product merits the confidence of the physicians. The physician can ask his own questions and make his own decision about using the product, but not only has he saved himself a vast amount of time but he has derived the benefit of a fearless, expert, fact-finding body whose sole function is to protect him and his patient.

No one physician, even if he were qualified, could afford to devote so much time and study to every new product. His Council renders this service for him, freely. Nowhere else in the world is there a group that performs the function so ably served by the Council on Pharmacy and Chemistry and the Council on Foods.

Mead Johnson & Company cooperates with both Councils, not because we have to but because we want to. Our detail man can always answer you, "Yes, this Mead Product is Council-Accepted."



GOGGLES RECOMMENDED FOR DESERT WARFARE

The many travels of a pair of Calobar Goggles through dust, storm, heat and cold are told in a story related by Lt. Lawrence Ball, of the American Field Service, who recently returned to America from Africa.

A pair of American Optical Transport Goggles with Calobar D Tillyer lenses was prescribed for Lt. Ball in New York. He used these goggles all last year while in Egypt, South Africa and Syria, and reports that under the most adverse conditions they were comfortable and wholly satisfactory.

According to Lt. Ball's own story, the temperature on the desert sands is around 140 to 150 degrees during the daytime and at night it drops to 50 above. The glare from the sun and sand is terrific. Mirages are a common experience to the eye. Each hill and slope in the desert increases the number of mirages when viewed with the naked eye or with ordinary goggles. Lt. Ball stated, however, that when he wore his Calobar Goggles the glare was eliminated and the mirages disappeared. In addition, his vision was sharp, color was seen in its true value, and his eyes felt cool.

Lt. Ball returned to Syria in November with about 750 men from various parts of the United States. He stated that any man going "over there" should take along a pair of Calobar Goggles for vision and comfort.

**The Sixty-Ninth Annual Meeting
of the
FLORIDA MEDICAL ASSOCIATION
will be held at the
Palm Beach Biltmore Hotel,
Palm Beach
April 13, 14, 15, 1942**

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

**BIOLOGICALS TEST SOLUTIONS
STAINS (MICROSCOPIC)
PRESCRIPTIONS**

Out-of-Town Orders Shipped by Return Mail

KOROMEX DIAPHRAGM



**KOROMEX
TRIP-RELEASE INTRODUCER**

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, President.....Miami
 MRS. F. W. KRUEGER, First Vice-President.....Jacksonville
 MRS. R. L. CLINE, Second Vice-President.....Lakeland
 MRS. PAUL KELLS, Corresponding Secretary.....Miami
 MRS. C. H. MURPHY, Recording Secy.-Treas.....Bartow
 MRS. M. J. FLIPSE, Historian.....Miami
 MRS. L. C. INGRAM, Parliamentarian.....Orlando

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity.....Jacksonville
 MRS. P. J. MANSON, Hygiene.....Miami
 MRS. RUPERT STOVALL, Public Relations.....Ft. Lauderdale
 MRS. E. M. HENDRICKS, Legislation.....Ft. Lauderdale
 MRS. GORDON H. IRA, Finance.....Jacksonville
 MRS. T. C. KENASTON, Exhibits.....Cocoa
 MRS. CLYDE ANDERSON, Archives.....St. Petersburg
 MRS. GEORGE C. TILLMAN, Student Loan.....Gainesville
 MRS. F. W. KRUEGER, Program.....Jacksonville
 MRS. R. L. CLINE, Organization.....Lakeland
 MRS. JOHN H. OWENS, Bulletin.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B".....Gainesville
 MRS. E. W. VEAL, Northeast "C".....Jacksonville
 MRS. J. C. GRIFFIN, Southwest "D".....Tampa
 MRS. W. C. PAGE, South Central "E".....Cocoa
 MRS. HILLARD WILLIS, Southeast "F".....Coral Gables

DADE COUNTY AUXILIARY

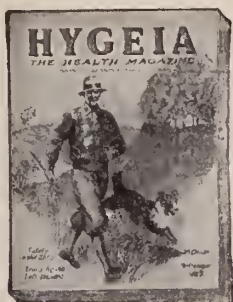
Over 50 doctors' wives attended the first fall meeting of the Auxiliary to the Dade County Medical Society held November 11, at the Miami Woman's Club. Luncheon was served after the meeting which was presided over by Mrs. James L. Anderson.

A letter from Dr. Walter C. Jones, state president of the Medical Association, regarding suggested work for the year was read and it was decided that defense work and a drive for new members would be stressed this year. It was announced that Mrs. Homer A. Reese had been elected second vice-president at a recent board meeting and Mrs. Barge was appointed tuberculosis seal sale chairman.

An appeal for contributions to the Jackson Hospital Library was made by Dr. C. Larimore Perry, president of the Dade County Medical Association, who also thanked members for support in the past. Mrs. W. J. Barge, state auxiliary president, gave a short report of the national convention and also urged a larger membership in the local Auxiliary.

The program included a flute solo by Walter Turner, accompanied by Dr. Roger J. Arango, and a report of medical current events by Mrs. Russell Morgan, program chairman.

*Allen's Invalid Home***MILLEDGEVILLE, GA.****Established 1890****For the treatment of
NERVOUS AND MENTAL DISEASES****Grounds 600 Acres****Buildings Brick Fireproof****Comfortable Convenient
Site High and Healthful****E. W. ALLEN, M.D., Department for Men
H. D. ALLEN, M.D., Department for Women
Terms Reasonable***Ambulance Directory***CAREY HAND****32-36 Pine Street****ORLANDO, FLORIDA****Telephone 4181****COMBS FUNERAL HOMES****Ambulance Service****Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.****FERGUSON FUNERAL HOME, INC.****1201 South Olive****WEST PALM BEACH, FLA.**



HYGEIA

The Health
Magazine
for Your
Waiting Room
Table

\$3.00 a Year

HYGEIA promotes confidence and understanding between physician and public. It is your own representative, giving in attractive printed form every month the health teaching you want your patients to have.

DIET

EXERCISE

SANITATION

CHILD CARE

RECREATION

BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn Street, Chicago

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome, H.W.&D.

(dibrom-oxymercuri-fluorescein-sodium)

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

HYNISON, WESTCOTT & DUNNING, INC.
BALTIMORE, MARYLAND

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Walter C. Jones, Miami.....	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
—Northwest	William C. Roberts, Panama City..	Stewart Thompson, Jacksonville.....	Panama City, 1942
—North Central	Alva T. Cobb, Gainesville.....	“ “ “	Ocala, 1942
—Northeast	Maximilian Stern, Daytona Beach	“ “ “	Jacksonville, 1942
—Southwest	Howard V. Weems, Sebring.....	“ “ “	Sarasota, 1942
—South Central	Carl D. Hoffmann, Orlando.....	“ “ “	Cocoa, 1942
—Southeast	Robert L. Elliston, Ft. Lauderdale	“ “ “	Miami, 1942
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery.....	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta.....	E. D. Shanks, Atlanta.....	Augusta, Apr. 28-May 1, 1942
Florida—			
Chapter, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami.....	Palm Beach, Apr. 12-13, 1942
Florida Dental Society.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	
Soc. of Derm. and Syph.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association...	T. C. Kenaston, Cocoa.....	I. M. Hay, Melbourne.....	Melbourne, 1942
Florida Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg...	
Association of Industrial Surgeons...	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Florida Medical Postgraduate Course...	Turner Z. Cason, Jacksonville.....	Chairman	
Soc. of Ophthal. & Otol.....	S. B. Forbes, Tampa.....	C. E. Dunaway, Miami.....	Palm Beach, Apr. 12-13, 1942
Florida Nurses Association.....	Mrs. M. Stetson, St. Petersburg...	Mrs. Phyllis Leonard, St. Augustine	Orlando, November, 1942
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach.....	Palm Beach, Apr. 12-13, 1942
Florida Pharmaceutical Association...	Mr. Emmett L. Brown, Palatka...	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association.....	W. H. Pickett, Jacksonville.....	Lloyd N. Harlow, Jacksonville.....	
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association...	Leland F. Carlton, Tampa.....	W. C. Page, Cocoa.....	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	
Wakulla Valley Med. Assn.....	Herbert E. White, St. Augustine...	Robert B. McIver, Jacksonville.....	Birmingham, 1942
West Coast Clinical Society.....	G. G. Oswalt, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	Memphis, May, 1942
Eastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Western Medical Association.....	Paul H. Ringer, Asheville.....	Mr. C. P. Loran, Birmingham.....	Richmond, November, 1942
Wakulla River Medical Society.....	E. C. Crouch, Jasper.....	T. H. Bates, Lake City.....	

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	James M. Nixon, M.D. Panama City	W. C. Roberts, M. D. Panama City		10	1	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	A. L. Stebbins, M.D. State Bd. of Health Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	50	1	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	7		
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		6		
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Tuesday Odd Months	5	3	A-2-'43 C. D. Whitaker, M.D. Marianna
	Jackson *Calhoun	W. R. Wanduck, M.D. Marianna	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	1	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	G. H. Garmany, M.D. Tallahassee	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	37	3	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	11		B-3-'43 J. M. Price, M.D. Live Oak
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	1	
	Taylor *Dixie, Lafayette	Ralph J. Greene, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	5		
B	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	A. T. Cobb, M.D. 331 W. University Ave. Gainesville	2nd Wednesday 7:30 P. M.	31	2	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Marion *Levy	Eugene G. Peek, M.D. Commercial Bk. & Tr. Bldg., Ocala	Harry F. Watt, M.D. Box 146 Ocala	3rd Thursday 12:30 P. M.	25	3	
	Pasco-Hernando- Citrus	J. T. Bradshaw, M.D. San Antonio	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15		
	Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P. M.	185	12	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
	St. Johns	A. C. Walkup, M.D. East Coast Hospital St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	11		
C	Putnam	C. M. Knight, M.D. Palatka	Allen P. Gurganious, M.D. Palatka	2nd Tuesday Even Months 7:00 P. M.	11		C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	42	2	
	Hillsborough	B. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	101	5	D-7-'43 John R. Boling, M.D. Tampa
	Manatee	W. E. Wentzel, M.D. Box 245, Bradenton	Wm. D. Sugg, M.D. Bradenton Bank Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	2	
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	102	52	
D	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	16		
	DeSoto-Hardee- Highlands-Char- lotte-Glades	A. T. Eide, M.D. Lake Placid	Howard V. Weems, M.D. 22 Oak St. Sebring	2nd Tuesday 8:00 P. M.	19		D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	M. F. Johnson, M.D. Box 1266 Fort Myers	H. Quillian Jones, M.D. 18-20 Leon Bldg. Fort Myers	3rd Tuesday 7:30 P. M.	17		
	Polk	J. R. Boulware, M.D. Box 367 Lakeland	Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	62	1	
	Brevard	T. C. Kenaston, M.D. 501 Delannoy Ave. Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11		E-9-'42 Carl D. Hoffmann, M.D. Orlando
E	Lake *Sumter	Marion B. O'Kelley, M.D. 203 First Natl. Bk. Bldg. Leesburg	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	18	1	
	Orange *Osceola	Frank D. Gray, M.D. 19 W. Washington St. Orlando	Fred Mathers, M.D. Box 53 Orlando	3rd Wednesday 8:30 P. M.	87	4	
	Seminole	Guy S. Selman, M.D. Sanford Clinic Sanford	Wade H. Garner, M.D. Sanford	2nd Monday 7:00 P. M.	11	12	
	St. Lucie-Okeech- bee-Indian River- Martin	Joseph B. Kollar, M.D. Vero Beach	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	1	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Frank Denniston, M.D. 616 Sweet Bldg. Ft. Lauderdale	E. C. Chamberlain, M.D. 720 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	38	1	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
F	Palm Beach	Wilbur O. Arnold, M.D. Box 1785 W. Palm Beach	William E. Bippus, M.D. 601 Guaranty Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	1	
	Dade	C. Larimore Perry, M.D. 525 N. E. 15th St. Miami	Herbert Eichert, M.D. 538 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	330	3	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	1	

Since 1860



Pharmaceutical Preparations

For eighty-two years John Wyeth and Brother have been manufacturing quality pharmaceuticals. During this period the integrity of the physician's prescription has been maintained by a policy of strict ethical promotion. Wyeth products are not known to the laity. Emphasis is placed on research and production control so that standardized potency and therapeutic effect are always obtained when the physician writes "Wyeth's."

The name Wyeth's is Reg. U. S. Pat. Off.

John Wyeth and Brother, Inc., Philadelphia

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

In the past a frequent complaint from mothers was the expense incurred when the large bottle of antiricketic was accidentally upset.



"Busy fingers"

can't spill **MEAD'S**

OLEUM PERCOMORPHUM

Even if the bottle of Mead's Oleum Percomorphum is accidentally tipped over, there is no loss of precious oil nor damage to clothing and furnishings. The unique Mead's Vacap-Dropper* is a tight seal which remains attached to the bottle, even while the antiricketic is being measured out. Mead's Vacap-Dropper offers these extra advantages also, at no increase in price:

Unbreakable

Mead's Vacap-Dropper will not break even when bottle is tipped over or dropped. No glass dropper to become rough or serrated.

No "messiness"

Mead's Vacap-Dropper protects against dust and rancidity. (Rancidity reduces vitamin potency.) Surface of oil need never be exposed to light and dust. This dropper cannot roll about and collect bacteria.

*Supplied only on the 50 c.c. size, the 10 c.c. size is still supplied with the ordinary type of dropper.

Accurate

This unique device, after the patient becomes accustomed to using it, delivers drops of uniform size.

No deterioration

Made of bakelite, Mead's Vacap-Dropper is impervious to oil. No chance of oil rising into rubber bulb, as with ordinary droppers, and deteriorating both oil and rubber. No glass or bulb to become separated while in use.

How to Use MEAD'S Vacap-Dropper

Remove both top and side caps. Wipe dropper tip. Place forefinger firmly over top opening and regulate rate of flow by varying the degree of pressure. Oleum Percomorphum is best measured into the child's tomato juice. This is just as convenient and much safer than dropping the oil directly into the baby's mouth, a practice which may provoke a coughing spasm.



MEAD'S OLEUM PERCOMORPHUM

More Economical Now Than Ever

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U.S.A.

Please, enclose professional card when requesting samples of Mead Johnson products to co-operate in preventing their reaching unauthorized persons.

NEW YORK ACADEMY OF

2

MEDICINE

3 E. 103RD ST.

The JOURNAL *of the* Florida Medical Association, Inc.

Vol. XXVIII

FEBRUARY, 1942

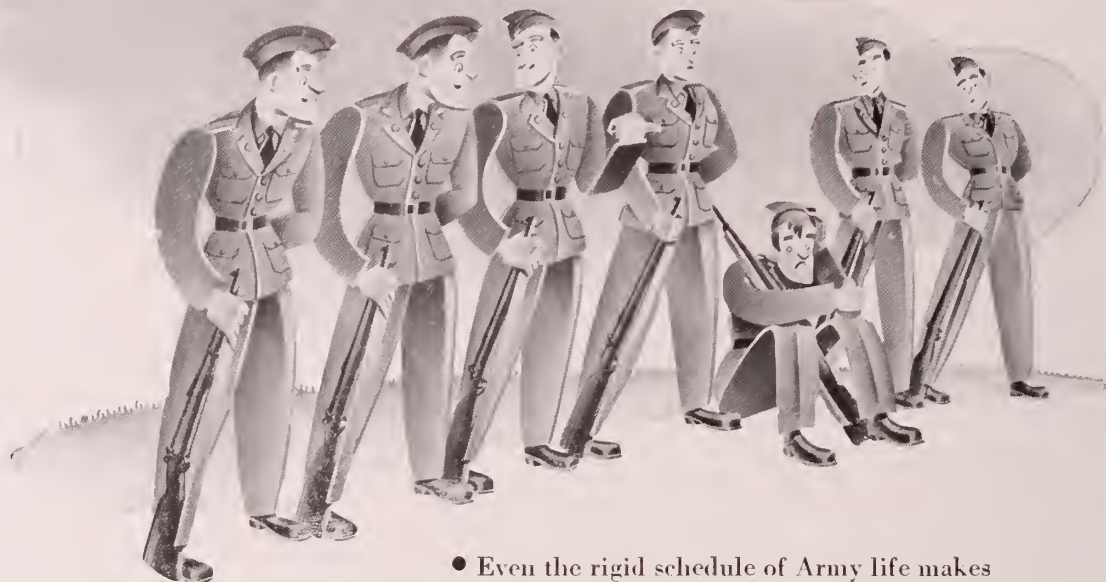
No. 8

THE N.Y. ACADEMY
OF MEDICINE
MAR - 8 1942
LIBRARY

CONTENTS

Surgical Treatment of Extensive or Advanced Cancer of the Skin, Richard M. Fleming, M.D., Miami.....	373
The Use of Quinidine Sulfate in the Treatment of Auricular Fibrillation, Louie Limbaugh, M.D., Jacksonville..	378
The Use of Cobra Venom and Oxygen in the Control of Cardiac Pain, Karl Hanson, M.D., Jacksonville..	381
Quinine as a Prophylactic in Influenza, H. A. Barge, M.D., Miami	383
Fractures of the Pelvis, T. H. Bates, M.D., Lake City	385
Compensation in Industrial Ophthalmology, Nelson M. Black, M.D., Miami	387
Editorials: Diets; Allergy.....	392
Meeting of the Statewide Public Health Committee.....	393
Recommendations to all Physicians with Reference to the National Emergency	394
Graduate Short Course.....	396
Florida East Coast Medical Association	396
Medical Licenses Granted	397
Pre-Convention Meeting	397
Councilors' Reports	398
Report of Florida Delegates to A.M.A. House of Delegates..	400
Are Your Society Dues Paid?	400
Births and Deaths	401
State News Items	401
Component County Societies	402
Abstract Department	404
Advertisers' Notes	404
Woman's Auxiliary	406
State and Sectional Meetings	410
Component Societies by Districts	411

AT EASE!



• Even the rigid schedule of Army life makes provision for regular, enforced periods of relaxation.

Not so in the stepped-up-tempo of civilian life. There's usually no one but the doctor to call a halt to his patient's hectic routine. When treatment for constipation is indicated, remember Petrogalar's advantages.

It provides a bland, unabsorbable fluid to augment the moisture in the stool and helps establish a regular, comfortable bowel movement.

Petrogalar* helps soften hard, dry feces and aids in bringing about a well-formed yielding mass that usually responds to normal peristaltic impulses.

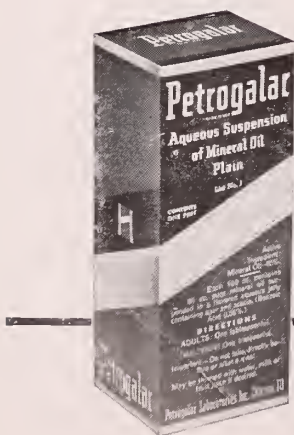
Consider Petrogalar in the treatment of constipation.

FOR THE TREATMENT OF CONSTIPATION

Petrogalar—

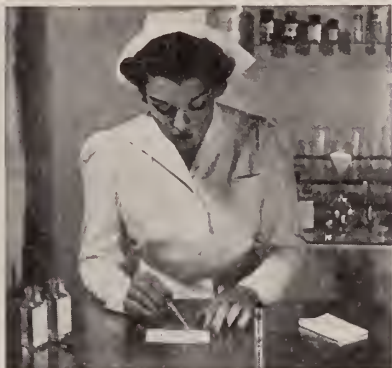


*Trade Mark. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 65 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.



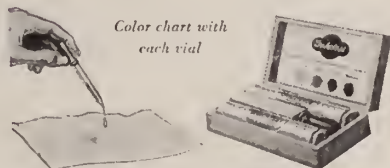
Petrogalar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



Convenient "Spot Test" For Diabetic Sugar

One drop of urine on a little Galatest powder gives an *immediate* reaction of *dependable* accuracy. No test tubes or boiling apparatus are required.



Diabetics Are Easily Taught this simple test. The simple equipment and the ease of carrying Galatest helps patients follow their regular daily sugar test routine wherever they may be. Booklet on request.

Handy Kit — Made of natural-grain wood, this compact kit contains two vials of Galatest, dropper and color chart. Obtainable through all drug and surgical supply houses.

ACCEPTED FOR ADVERTISING IN THE JOURNAL
OF THE AMERICAN MEDICAL ASSOCIATION



The Denver Chemical Mfg. Co.
163 Varick Street, New York, N. Y.

86c out of each \$1.00 gross income used
for members' benefit

PHYSICIANS CASUALTY ASSOCIATION PHYSICIANS HEALTH ASSOCIATION

Hospital, Accident, Sickness



INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	For \$64.00 per year
\$10,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$50.00 weekly indemnity, accident and sickness	For \$96.00 per year
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	For \$96.00 per year

39 years under same management

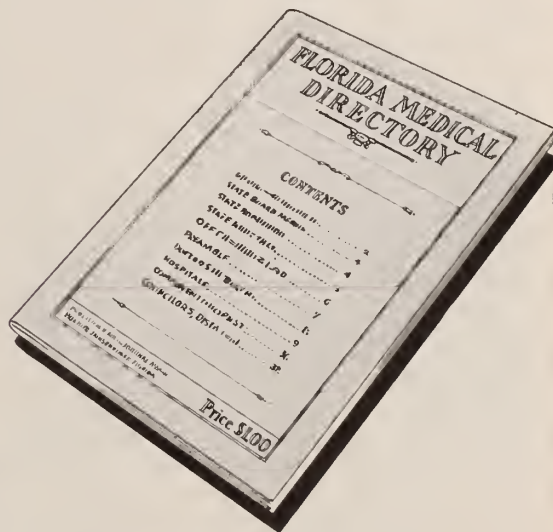
\$2,000,000 INVESTED ASSETS
\$10,000,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to

400 First National Bank Building
OMAHA, NEBRASKA



1942 DIRECTORY

WILL SOON BE OFF THE PRESS.
PLACE YOUR ORDER NOW.

FLORIDA MEDICAL ASSOCIATION

Box 1018 - - - - - JACKSONVILLE, FLORIDA

Please send me one copy of the fifth edition of the Florida Medical Directory. Enclosed is One Dollar (\$1.00).

Name.....

Address.....

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla.

Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924



BRAWNER'S SANITARIUM

Established 1910

SMYRNA, GEORGIA
(Suburb of Atlanta)

*For Nervous and Mental Disorders
Drug and Alcohol Addiction.*

Approved diagnostic and therapeutic methods.

Metrazol and Electro-shock in selected cases.

Special Department for General Invalids and Senile Cases at Monthly Rates

JAMES N. BRAWNER, M.D., Medical Director
ALBERT F. BRAWNER, M.D., Department for Men
JAMES N. BRAWNER, JR., M.D., Department for Women.



The chemical composition of Kara in glass and in tins is identical

Vomiting of Pregnancy

THE readily assimilated sugars in Karo Syrup make it an ideal carbohydrate to combat the dangerous ketosis of pregnancy.

Free to Physicians

"Infant Feeding Manual For Physicians" is a concise, helpful monograph containing specific information and tested Karo feeding formulas. Sent postpaid.

Please Write Medical Department

CORN PRODUCTS REFINING CO.

17 Battery Place, New York, N. Y.



The stormy symptoms of the menopause may be greatly tempered by administration of Theelin. Theelin replaces or supplements diminished ovarian estrogen secretion. By so doing it acts as a beneficial influence to help bridge the menopausal period that lies between early ovarian hypofunction and adjustment to the estrogenic deficiency. The clinical case of Theelin rests on more than three hundred published papers and the effective use of millions of doses . . . in the treatment of the climacteric, senile vaginitis, kraurosis vulvae, gonorrheal vaginitis in children, and other conditions related to estrogenic deficiency.

Theelin is a pure crystalline estrogen, standardized in the laboratories of Parke, Davis & Company. Before release, each lot is also standardized physiologically and chemically by the Biochemical Laboratory of St. Louis University.

Theelin Suppositories for vaginal use and Kapseals Theelol for oral administration are available where sustained therapy between injections of Theelin is desired.

Ampoules

Kapseals

THEELIN THEELOL

products of modern research offered to the medical profession by

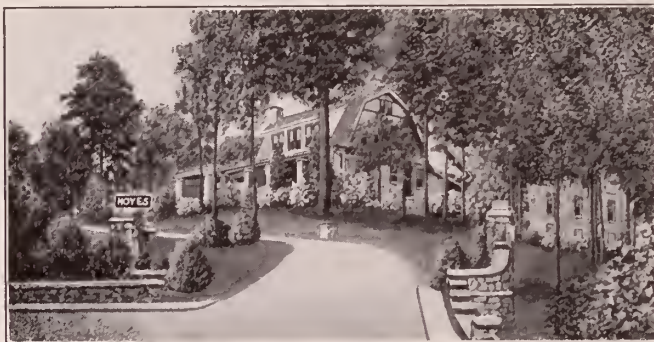
PARKE, DAVIS & COMPANY
DETROIT, MICHIGAN

Over 75 Years of Service



to Medicine and Pharmacy





HOYE'S SANITARIUM

"In the Mountains of Meridian"
Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and those suffering from ARTHRITIS also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

An eleemosynary or not-for-profit institution. Well equipped for the individual treatment and management of all types of patients.

Special rates may be arranged for persons in straitened circumstances by correspondence.

AIR CONDITIONED



North Miami Ave. at 79th St.

Telephone 7-1824

Resident and Consulting Neuropsychiatrists

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, starting January 12th and every two weeks thereafter. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course will be offered starting June 1st. Two Weeks Course in Gastro-Enterology will be offered starting June 15th. One Month Course in Electrocardiography and Heart Disease every month, except December and August.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting March 9th. Informal Course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting April 20th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered starting April 20th. Five Weeks Course in Refraction Methods starting March 9th. Informal Course every week.

ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

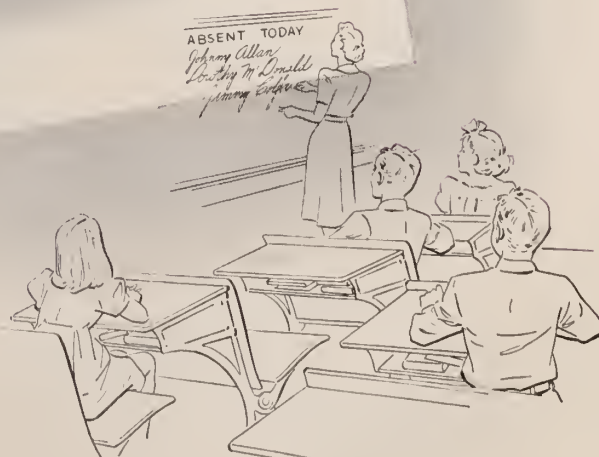
Registrar, 427 South Honore Street, Chicago, Ill.

"Home with a head cold"

When you prescribe Racéphedrine Hydrochloride (Upjohn) for topical use in children, your small patients will find that it relieves nasal congestion without unpleasant smarting or burning. The reason is that the vehicle used in making the 1% solution is isotonic, and therefore relatively nonirritating.

Racéphedrine Hydrochloride (Upjohn) is available as a 1% solution in Modified Ringer's Solution, in one ounce dropper bottles for prescription purposes, and in pint bottles for office use.

Upjohn
KALAMAZOO, MICHIGAN



Fine Pharmaceuticals Since 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



All-out production for Victory demands top efficiency from every workman. No one can do his best work unless his eyes are right. Your responsibility to a fighting America is the supplying of the best vision possible to the greatest number of people possible. Our job is to supply you with optical products designed and built to carry out your specifications with precision.

The SOUTHEASTERN OPTICAL CO., Inc.
distributors of BAUSCH & LOMB products

.....in *Miami, Florida*



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928

REGISTERD SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident Physician, Complete Physical Therapy. Four Acres Beautifully Landscaped Grounds. Sports, Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Site High and Healthful Convenient

E. W. ALLEN, M.D., *Department for Men*
H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

REDUCING NICOTINE INTAKE

HOW MUCH COOPERATION CAN YOU COUNT ON WHEN MODIFYING PATIENTS' SMOKING?

USUALLY the physician has two objectives in his program for improving a patient's smoking hygiene: 1. Reduction of the nicotine intake. 2. Assurance of his patient's full cooperation.

Your recommendation of Camel cigarettes is sound on both counts, because Camel is the slower-burning brand. Medical—research authorities* find that the slower-burning cigarette produces less nicotine in the smoke. Camel's scientific tests** show that Camels burn slower and that the smoke of Camels contains less nicotine than the average of the other brands tested.

Camel's lesser nicotine content in the smoke provides a valuable improvement in hygiene, while Camel's slower burning—the “pleasure factor” for extra mildness, better flavor—assures the cooperation of the patient.

FOR THE PHYSICIAN WHO WISHES TO REVIEW THE MODERN MEDICAL ASPECTS OF SMOKING

—a recent article by a noted physician. Send for a reprint from The Military Surgeon, July, 1941. Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

*J. A. M. A., 93:1110, Oct. 12, 1929

Bruckner, *Die Biochemie des Tabaks*, 1936

***The Military Surgeon*, Vol. 89, No. 1, p. 7, July, 1941

CAMEL

THE CIGARETTE OF COSTLIER TOBACCOS

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH
PALM BEACH



SITE OF THE
Florida Medical Ass'n Convention
APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONEY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

SULFATHIAZOLE

Winthrop



Subjected to Rigid System of Controls

PNEUMOCOCCUS INFECTIONS . . . Thousands of cases of pneumococcus pneumonia have responded with dramatic promptness to Sulfathiazole.

STAPHYLOCOCCUS INFECTIONS . . . With Sulfathiazole the mortality rate of staphylococcus septicemia has been strikingly reduced.

GONOCOCCUS INFECTIONS . . . Early cessation of discharge and a high percentage of cures have been reported.

Write for literature which discusses the indications, dosage and possible side effects of Sulfathiazole.

HOW SUPPLIED: Sulfathiazole-Winthrop is supplied in tablets of 0.5 Gm. (7.72 grains); also (primarily for children) in tablets of 0.25 Gm. (3.86 grains).

Powder in bottles of 5 Gm., ¼ lb. and 1 lb.

**WINTHROP
CHEMICAL COMPANY, INC.**

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.



WINDSOR, ONT.

The art of doing things well



EVERY empty capsule made by Eli Lilly and Company passes under the watchful eyes of a Lilly inspector. When bright light is transmitted through glistening gelatin, minute cracks and bubbles are detected — defects which would detract from the perfection of Lilly Pulvules (filled capsules). An expert inspects 200,000 capsules a day, and while less than one percent is discarded the operation is regarded as an essential safeguard to Lilly Quality.

Lilly

Eli Lilly and Company

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, February, 1942

Number 8

SURGICAL TREATMENT OF EXTENSIVE OR ADVANCED CANCER OF THE SKIN

RICHARD M. FLEMING, M.D.

MIAMI

In the wards of any large municipal hospital there may be observed one or more patients of the "doomed battalion" of hopeless incurable victims of cancer, who have been relegated to the stage of terminal care. The question of how the plight of such patients might be obviated by improvements in early diagnosis and treatment is not within the scope of this paper. The present purpose is to emphasize the importance of a careful determination of the extent of the cancerous condition in each patient, with a view to consideration of the possibility of checking the disease by any measure.

As long as cancer remains a local disease, no matter how extensive, serious consideration should be given to the possibility of its eradication, even if multiple, extensive, and mutilating operations are required. When the regional lymph nodes are obviously involved in a metastatic process, the lesion is still within the realm of curability provided distant metastases are absent.

The most striking example of local malignant disease which may be curable though extensive, is the basal cell epithelioma, which destroys an ever widening area of tissue without metastasizing. Although radiosensitive and readily destroyed by proper irradiation, it may, after being inadequately treated several times over a period of years, invade the deeper structures, where secondary infection, fibrosis and even *in situ* carcinoma may occur. It then assumes formidable proportions, and its control may require mutilating radical surgery.

The type of cancer that develops in scars is usually a slowly growing, mature squamous cell carcinoma, which is radioresistant. Metastasis is late; therefore, this type should receive special and perhaps optimistic consideration even when seen late in its course. Adequate radical surgery is usually curative and is indicated even in the most extensive growths if encountered before

distant metastasis occurs.

When palpable regional nodes are present, the disease may still be controlled provided it is possible to eradicate the primary lesion together with the nodes. A considerable number of these nodes become inflamed as a result of secondary infection of the ulcerated tumor mass. A block dissection of the entire lymph chain and surrounding tissue is, however, indicated when such nodes are accessible and when the inflammation fails to regress after control of the primary tumor. I refer especially to axillary and epitrochlear dissection in the upper extremity, cervical dissection in the case of lesions about the head and inguinal dissection in lesions of the lower extremities and external genitals.

Radiation therapy plays a role in many cases of advanced cancer, especially the basal cell type. Its use is also indicated in many lesions inaccessible to complete surgery. Interstitial irradiation is especially important in the type of growth inaccessible to surgery and yet not particularly radiosensitive, such as extensive carcinoma of the tongue or floor of the mouth.

The combination of all the methods at one's disposal may be necessary in eradicating certain advanced or extensive cancers, as illustrated in the cases presented. Primary roentgen therapy directed to the lesion followed by interstitial irradiation to those areas which fail to respond, and finally excision of the regional lymph draining area are not infrequently productive of surprisingly good results. It is hardly necessary to add that constant close cooperation between surgeon and radiologist with intelligent interpretation of gross and microscopic changes of tissue is essential.

Naturally, if the physician is to give the patient every possible chance for survival, he must be prepared for disappointments. Certainly the mortality rate can be no lower if he tags a patient as inoperable and allows him to die peacefully without benefit of surgery because his condition is poor and the operation difficult. He is assuredly justified in undertaking the most formidable procedure in dealing with a disease which offers no compromise with death, even if the chances for cure are small.

There is, of course, the other side of the question. Should one extend aid in curing a patient of cancer only to make a hopeless invalid of him? This question arose in the second case presented when it became apparent that the patient would be an invalid for the rest of her life. Although every case must be considered individually and this factor considered seriously, there are few occasions when a patient with a curable cancer must be allowed to die because the consequences of treatment would make life undesirable. The cases described, with the exception of cases 4 and 5, are from the Tumor Clinic of the Jackson Memorial Hospital.

Case 1. A 59 year old colored man was first seen in consultation at the clinic on Jan. 15, 1940, after a long period of treatment and observation for a lesion in the groin, which had grown steadily worse. About eight years previously he had first noted a small pimple in the groin on the left side and had picked it with a pin. Ulceration and profuse discharge had followed, with improvement under local therapy. Later a recurrence had resulted in ulceration extending to the medial surface of the thigh and eventually to the lateral surface of the scrotum, perineum and shaft of the penis. Local application of tartar emetic and roentgen therapy had failed to cause improvement, and the condition had progressed up to the time of consultation.

A biopsy established a diagnosis of squamous cell carcinoma originating on a granuloma. The ulceration and infiltration did not involve the urethra or corpus cavernosum. There were several palpably enlarged lymph nodes in the inguinal region on the left side and one rather large node in the femoral region on the right side. Physical signs, examination of the sputum and roentgen examination confirmed the presence of pulmonary tuberculosis. Smears were negative for Donovan bodies; the Frei and Wassermann tests gave negative results.

On February 12 excision of the diseased area was accomplished by outlining the mass in the inguinal region and reflecting skin flaps so that a complete block dissection of the entire mass with its gland bearing area could be effected. The mass with the underlying fascia lata was dissected from laterally to medially. The spermatic cord was divided at the external ring, and a segment of the vena saphenous magna was excised as it traversed the mass in order that a block dissection might be accomplished. The entire left half of the scrotum with testicle and cord was removed.

Simple closure was not possible because of the excessive sacrifice of tissue. The inguinal wound was, therefore, approximated, and the rest of the wound was closed by approximating the margins of the amputated scrotum to the thigh. The shaft of the penis was closed with some tension by simply approximating the margins of the wound.

After a rather stormy postoperative experience the patient made a complete recovery and was discharged to the clinic on March 21 with the wound almost completely healed. It has remained healed since that time. Microscopically the inguinal nodes showed no evidence of metastasis, and the enlarged node in the femoral region on the right side disappeared. The patient's only complaint at present is that the penis veers to the left when erect, but this condition is not incapacitating.

This was a case of carcinoma arising on an old granuloma, probably granuloma inguinale.

As with other long-standing irritations of the skin, malignant degeneration should be considered, and biopsy should be performed when healing fails to take place after a reasonable length of time. In this case surgery was withheld much too long. In consequence, extension of the disease to the penis and scrotum occurred making radical extirpation and reconstruction much more difficult and less sure. Since the local nodes showed no evidence of malignant disease and the wound healed promptly and has remained healed, I believe there will be no recurrence here as the excision was wide and accomplished en bloc.

Case 2. A 34 year old white woman was first seen at the clinic in June 1938. She had fallen into a fire at 7 months of age, and the right hand and right side of the scalp had been severely burned. After local treatment with salves and ointments for eighteen years, the open lesion on the scalp had shrunk to the size of a silver dollar, the rest of the area being covered by fairly dense scar tissue. The open area had then begun to drain more, grow larger and cause both local pain and general headaches.

At the time of examination in the clinic it was ascertained that about two years previously the patient had received treatment at the hospital. A biopsy at that time had resulted in a diagnosis of squamous cell carcinoma grade 1, and she had been treated by superficial roentgen radiation without improvement. Subsequently the entire ulcerated area had been excised, and the skull had been curetted. At that time the scrapings from the skull had shown invasion of the bone by squamous cell carcinoma. Despite further radiation therapy the disease had progressively invaded the skull and the scalp.

On examination, a large ulcerated area about 6 by 8 cm. in size occupied the frontoparietal area on the right side in the midst of a dense scar which covered an area about 10 by 14 cm. in the same region. An area of roughened skull from 3 to 4 cm. in extent was exposed in the center of the ulcerated portion, and in several areas the dura could be seen pulsating beneath small perforations in the skull. There were no palpable nodes in the neck. Roentgen studies of the chest and the spine gave no evidence of metastasis.

It was felt that although the dura was probably involved by tumor, the only chance of saving the patient was by radical surgery. Accordingly, Dr. Duncan Owens and I operated, and a wide radical excision of the scalp and underlying skull was performed. The dura separated from the inner surface of the skull without difficulty although it was adherent to the perforated area. Several biopsies of the dura revealed no evidence of malignant disease.

About five weeks postoperatively the central portion of the dura, which had been adherent to the skull, sloughed away, probably because of necrosis owing to radiation. When it was removed, several cortical abscesses were found. They were unroofed and packed, and a large cerebral hernia then developed. In about six weeks the cerebral hernia had receded, and the entire operative site was smooth and covered with granulation tissue of healthy appearance.

The flattened granulating surface of the dura and the cerebrum was carefully observed, and biopsies were repeated at intervals of two weeks. A diffuse recurrence was discovered about three months after the first operation. The patient was treated with low voltage unfiltered roentgen rays over the area with prompt recurrence of the cerebral fungus, which was much more extensive

than before. Biopsies of the brain tissue itself gave no evidence of tumor following this therapy, but there was some extension into the bone as shown by roentgen examination. The fungus receded to the level of the skin, and it was felt that since the disease was still a local process further radical surgery was indicated.

The patient was again subjected to surgery, and wide excision of the involved portion of the skull was accomplished. Incidentally, the longitudinal sinus was torn during this procedure, and the resulting massive hemorrhage was controlled only after opening the dura on the opposite side and applying hemostats vertically. The clamps were left in place five days.

For some time following this last procedure convalescence appeared to be taking place normally, and the wound was granulating well. A diffuse recurrence was discovered in November, and the patient expired Dec. 27, 1939, eighteen months following the first operation after she came under observation at the clinic. At autopsy, examination of the specimen showed marked distortion and destruction of the brain.

This case illustrates the importance of early radical surgery. If the tumor had been excised widely enough at the time of the first procedure, or if the skull had been resected instead of curetted at the second session, the patient would have survived in all probability. This case also illustrates the ineffectiveness of roentgen therapy against scar cancer.

Case 3. D. N., a 74 year old man, came to the clinic in 1939 for treatment of a lesion of the wall of the chest in the sternal area. He related that in 1896 he had noticed a nodular lump (supposedly lupus) over the upper part of the sternal area, which later had become ulcerated and had discharged pus. He had been sent to the Charity Hospital in Cleveland for roentgen treatments, being one of the first patients so treated. He stated that he had received treatments daily for thirteen months! At any rate, the area on the chest had begun to heal, and at the end of that period a large firm scar had formed in this area and it had remained completely healed until 1936. At this time he had incurred a series of minor abrasions to the scar over a period of from twelve to eighteen months. They had healed fairly promptly until the last injury early in 1937 when he had been struck by a heavy piece of lumber.

After several months with a nonhealing open wound, he applied to the hospital for treatment, at which time biopsy revealed squamous cell carcinoma grade 1, radio-resistant. There was an ulcerated irregular area about 1.5 cm. in diameter with raised serpiginous borders in the midst of a dense contracted scar about 6 by 8 cm. in size overlying the upper part of the sternal region. The bone was apparently not involved. Two series of roentgen treatments of about 4,000 r each produced extensive destruction of the surrounding scar tissue, but failed to check the spread of the ulceration. The lesion now measured about 3 cm. in diameter and extended in to the bone.

On April 16, 1938, the entire lesion including the underlying bone was thoroughly fulgurated with the electro-surgical unit. The surgeon felt that the age of the patient mitigated against radical excision, which would have necessitated removal of the manubrium sterni. This operation failed to check the extension of the neoplasm downward, and the patient was again operated upon on August 15 with extensive fulguration being done. The surgeon felt that he was unable to get beyond the limits of the growth; he found the upper portion of the gladiolus destroyed as well as the sternal portion of the third rib exposed.

This procedure left an extensive sloughing wound of the sternal region with devitalized bone partially necrotic at the base. The wound continued to drain, and in Jan-

uary 1939 when I first examined the patient, there was extensive sloughing in and over the manubrium sterni with necrotic bone, destruction of the sternoclavicular articulation on the right side and extension to the supra-sternal notch. There were several small hyperplastic nodules about the margin of the wall.

Surgery was again resorted to, and extensive resection of the involved tissue including the manubrium sterni, the inner half of the clavicle and the second and third costal cartilages on the right side was done. The entire site of the excision was fulgurated with the electro-surgical unit following this procedure.

Since that time the wound has been granulating nicely with epithelization from the margins. Repeated biopsies have shown no residual tumor tissue although an occasional sequestrum was extruded from the wound for several months following this last procedure. The wound is now completely healed.

The patient in this case has probably survived roentgen therapy for one of the longest periods on record, having been first treated in 1896, forty-four years ago. One cannot criticize the radiologists of 1896 because of a severe reaction of the skin from treatment with roentgen rays, especially when the patient still survives! With modern roentgen treatment, however, and the benefits of the cumulative experience of the past, severe dermal changes are not often seen. The consequent malignant changes, therefore, are infrequent.

This patient should have had radical surgery when the diagnosis of malignant disease was first established. At that time it would have been possible to excise the lesion without involving the bone and later to place a partial thickness graft over the defect.

Roentgen therapy is not only ineffective in most scar cancers, but is actually harmful because of extensive destruction of already avascular devitalized tissue. Treatment of scar cancer, especially in scars of this age, situated over dense bony or fibrous structure, is essentially surgical. This observation is shared by most of the authors consulted on this subject. Roffo and Gandolfo¹ reported a series of 25 cases of carcinoma in scars from burns in which their only cases successfully treated were those treated surgically. Treves and Pack² recommended surgery in all cases of scar cancer except those of early superficial small or basal cell tumors. For these they suggested treatment with heavily filtered radium at a distance, but admitted that some of these lesions must eventually be excised. Neves,³ who has had more experience with burn and scar cancer than any one else, having observed hundreds of cases of scar cancer resulting from Kangri burn in Kashmir, India, stated in a personal communication to me that practically all of these cases are

handled surgically.

Case 4.⁴ E. W., a white married man aged 54, was seen in consultation with Dr. A. G. Levin on May 15, 1939, because of recurrent ulceration and tumor formation in old scars of both thighs. The patient had fallen in a bonfire forty-nine years previously and had sustained severe burns on both thighs and legs. Healing had taken place slowly over a period of several years with dense scarring over the posterior surface of both thighs and recurrent ulceration repeatedly occurring. In 1914 pinch grafts had been applied to the right thigh in an effort to heal the wound, but this measure had proved only partially successful.

In September 1938, eight months prior to coming under my observation, the patient had gone to Pikes Peak where he had experienced severe sunburn of the thighs with vesicular formation. Following this occurrence the right thigh had again become ulcerated in several areas, and the ulcer on the dorsum of the left thigh had begun to enlarge with tissue proliferating above the level of the skin. This process had progressed steadily until the tumor had reached the size of "half a tennis ball."

A biopsy of the tumor was made and a pathologic diagnosis of sarcoma was reported by Dr. Phillip Rezek. The patient was then admitted to the Jackson Memorial Hospital for operation.

The operation was performed on May 27, 1939, under spinal anesthesia. With the cutting current of the endotherm, wide excision of the entire thickened area on the dorsum of the left thigh was done, the excision being carried down to the muscles of the thigh. An area 15 cm. in width by 17 cm. in length was excised, and a biopsy specimen was taken from the ulcerated area of the right thigh.

The wound was allowed to granulate to the skin level, and the patient returned to the hospital on July 7 for skin grafting. Thick split grafts were removed from the buttocks with the Blair-Brown skin suction apparatus and transferred to the defect. By August 30 the entire grafted area had the appearance of normal pliable skin of full thickness, and there was no evidence of disease.

The biopsy of the ulcerated portion of the right thigh revealed no evidence of malignant disease. Excision of the entire ulcerated area was deemed advisable, however, as a prophylactic measure. This operation was performed on August 15 and was followed by partial thickness graft as done on the other thigh. This graft was likewise successful.

The patient remained free of disease for about nine months, when on routine follow-up examination a large mass was discovered in the left inguinal region. Biopsy of the inguinal mass revealed a highly anaplastic sarcomatous tumor entirely different from the original tumor.

The patient was treated with radiation therapy by Dr. Levin, and the tumor mass completely disappeared. Thereafter the patient remained well for six months. Diffuse metastases then developed, and he succumbed about nineteen months after the first operation.

On retrospect, in the treatment of this patient there should have been dissection of the inguinal nodes following the original operation. It is doubtful that this measure would have been curative, however, since the deeper nodes were involved when the metastasis was first discovered. Nevertheless, I believe that the patient should be given the benefit of the possibility of cure, however remote.

Case 5. D. W., a 44 year old man, was a private patient of Dr. George Lilly, whom I had the pleasure of assisting at one of the surgical procedures. He related that a small keratotic lesion, appearing in 1929 on the

right cheek midway between the ear and outer canthus of the eye, had been cauterized with an "electric needle" twice, but had recurred each time, gradually enlarging. Also in 1929, a gland had been excised from the right side of the neck, and no further masses in the neck had been observed.

In April 1939 the patient was given roentgen therapy elsewhere followed by treatment with radium needles. As the lesion enlarged during treatment, more roentgen therapy was given. The lesion continued to enlarge until it involved the entire right side of the face, exposing a portion of the zygoma and involving both upper and lower eyelids.

In December 1939 a preliminary enucleation of the right eye was done followed by wide endotherm excision of the entire tumor. It was necessary to resect the parotid gland and a portion of the exposed zygomatic arch in order to insure complete eradication of the growth. The dissection was carried down to the temporal and masseter muscles, and all tissues superficial to these structures were removed. The patient made a good recovery, and the wound granulated rapidly. Within two weeks the granulations were ready for grafting which was done by the application of multiple Davis-Riverdin grafts.

About six weeks later a diffuse recurrence was noted, and, the patient was subjected to surgery again for wider and more radical excision. The line of excision extended well up in the temporal area down to the skull. The temporal, masseter and external pterygoid muscles were removed, leaving a large part of the underlying skull and mandible exposed. The lateral wall of the antrum was apparently involved; wide excision of this structure revealed the interior to be normal. The remaining portion of the zygoma was resected, and the soft parts of the cheek were entirely removed. A buccal fistula was thus produced. The entire wound was then coagulated with the electrosurgical unit.

The wound healed nicely, and multiple dull holes were made in the exposed cortex of the skull and the mandible in order to allow diploic granulations to form a base for epithelization. Epithelization progressed steadily, covering the entire area except the buccal fistula within six months of the second operation. At this time a tubed pedicle flap graft had been started on the back and waltzed toward the defect. The defect in the cheek was finally closed in December 1940, and the patient has remained well with no evidence of disease since that time.

This is an instance of inadequate electrocoagulation followed by inadequate radiation therapy. The result is disastrous, and in this case was almost irreparable. Many small keratoses, or even basal cell carcinoma, may be destroyed by electrosurgical desiccation, but this procedure should be carried out under local anesthesia so that the entire area may be completely destroyed. In cases of epithelioma the full thickness of skin must be destroyed with a small area of surrounding skin also; thus coagulation is not advisable in lesions measuring over .5 cm. Excision is much to be preferred. It is true, however, that basal cell carcinoma is a radiosensitive tumor and adequate roentgen therapy is usually curative.

SUMMARY AND CONCLUSIONS

Five cases of advanced or extensive cancer of the skin have been presented. Two of the patients in these cases succumbed, and three are living with no evidence of disease.

Careful evaluation of every case of cancer for possibilities of salvage by any method or combination of methods is urged.

Close cooperation between surgeon, radiologist and pathologist produces the best results in this type of case.

Scar cancer is best handled by early radical excision with dissection of regional lymph nodes when indicated.

Prophylaxis in this type of cancer is possible by proper treatment of burns, with early skin grafting using skin of adequate thickness to prevent subsequent scarring or contracture. Granulomas and other chronic irritations of the skin should be dealt with similarly if response to conservative measures fails to occur.

REFERENCES

1. Roffo, A. H., and Gandolfo, A.: Carcinoma desarrollado sobre cicatrix de quemadura; 25 casos observados en el Instituto de Medicina Experimental, Presna méd. argent. **21**: 351-369 (Feb. 21) 1934.
2. Treves, N., and Pack, G. T.: Development of Cancer in Burn Scars; Analysis and report of 34 Cases, Surg., Gynec. & Obst. **51**: 749-782 (Dec.) 1930.
3. Neves, E. E.: Personal Communication to the Author.
4. Fleming, R. M., and Rezek, Philipp: Sarcoma Developing in an Old Burn Scar, Am. J. Surg. **54**: 457-465 (Nov.) 1941.

740 duPont Bldg.

DISCUSSION

DR. JAMES M. HOFFMAN, Pensacola: Dr. Fleming has given the members of the Association an illuminating explanation of a subject that really should be of the utmost interest to each one of us. The treatment of cancer is not a problem that one practitioner alone can handle. It is one disease wherein the active cooperation of all types of physicians is needed. The pathologist, the roentgenologist, the surgeon, the internist and the general practitioner should be aware of the possibilities of diagnosis first and of treatment in the second place. I feel that the specialist, be he roentgenologist, surgeon or other specializing physician, should not limit the treatment to his particular field. Physicians sometimes try to force the roentgenologist to give the treatment alone when the surgeon could do more in his field. I think that this is one type of case in which cooperation is of the utmost importance.

Cooperative endeavor can be brought out particularly by the establishment of cancer clinics throughout the state. There the proper evaluation of methods of treatment can be arrived at in communities. A number of physicians feel that cancer clinics are simply establishments or places in which to handle charity cases. That is by no means the object of the clinics for they are truly scientific in purpose.

I think Dr. Fleming's work has been helped by the cancer clinic that he has established in his own community. The physicians of my community know that our cancer clinic has been of inestimable value to all of us for there we can discuss the whys, wherefores and whatnots in the treatment and diagnosis of cancer. A general discussion is participated in by all members present with the recognition of each specialty. We feel that we come to more of a final conclusion as to what to do in the individual case.

Unfortunately I am not in a position to discuss Dr. Fleming's diagnostic procedure in that locality. I feel, however, that he has demonstrated a thing that we all

should bear in mind in the surgical treatment of cancer. We should consider this disease much like we would regard a serious fire that is reaching a certain locality. It is frequently necessary to remove vital elements in its path in order to stop the conflagration. There is the same situation in treating cancer. We must often sacrifice vital structures leaving more or less debility, but if these measures finally cure the disease, the sacrifice should be made without qualms. When good health follows the removal, it is frequently worth the necessary destruction.

Another point he brought out is the necessity for following up the cases of cancer which are partially cured. All of us who have had experience with these cases know that occasionally several years will elapse and then suddenly there is a recurrence. Unless we keep our eyes open and instill in the minds of the patients in these cases that they must come back for frequent examinations, sometimes we may be unable to cope with the recurrences.

I want to thank Dr. Fleming for his excellent presentation.

DR. FLEMING (concluding): I simply want to endorse everything Dr. Hoffman said about tumor clinics. The physicians of my section have found in our tumor clinic, since its establishment in our community, that we are seeing far more cases of cancer than were seen before its organization. I had occasion to review the cases of carcinoma of the skin which were treated at the Jackson Memorial Hospital prior to the formation of the tumor clinic. There were probably only a half dozen cases in our records. Since the formation of the tumor clinic we have had numerous cases.

In my opinion, the important thing about the tumor clinic, as Dr. Hoffman brought out, is that an opportunity is provided for the surgeon, radiologist, pathologist and other specialists to meet, go over the material together and consider the best treatment for each individual case. These conferences result in mutual education and provide the patient with the benefit of our combined ideas.

I was expecting some of the radiologists to question some of the things I have said about radical surgery in the treatment of this type of case and I was ready to concede a point to them. A basal cell carcinoma which is radiosensitive can be completely destroyed by proper irradiation. As a matter of fact, it is the method of choice in many early tumors. If the tumor enlarges during treatment, however, or fails to regress in a reasonable length of time, I want to urge that no further valuable time be wasted and that the patient be turned over to the surgeon without delay. Another point to be considered in advising roentgen therapy in some cases with extensive lesions is that the effects of radiation in destroying the tumor may produce such extensive scarring or defects or late necrosis owing to radiation, as we have seen in some of our cases, that surgery is much to be preferred from the start. Reconstructive or plastic operations are often more difficult in this type of case treated by irradiation.

Relax

AT FLORIDA'S RIVIERA

Palm Beach - - - - - April 13-15

THE USE OF QUINIDINE SULFATE IN THE TREATMENT OF AURICULAR FIBRILLATION

LOUIE LIMBAUGH, M.D.
JACKSONVILLE

Many and varied opinions have been written on the value of quinidine since its use in the treatment of auricular fibrillation was advocated by Frey in 1918. It has been put on trial therapeutically in most of the arrhythmias. This discussion, however, is limited to its use in chronic auricular fibrillation and to the presentation of 7 abstracted cases.

Quinidine reduces the excitability of the cardiac muscle chiefly by lengthening the refractory period. It also diminishes the excitability of the vagus nerve, especially the intramuscular endings. In addition, the drug has some vasodilator effect on the coronary arteries. Toxic effects may be observed occasionally in patients with an idiosyncrasy to the drug. These may be manifested by dizziness, tinnitus aurium, nausea, vomiting, diarrhea, palpitation, or weakness.

Restoration of normal rhythm in from 65 to 80 per cent of cases following the use of quinidine in auricular fibrillation has been reported in the literature. The greatest objection to its use has been raised because of the supposed common occurrence of embolism arising from an intramural auricular thrombus when normal rhythm is restored. A review of the more recent articles on the subject indicates that this possibility has been greatly overemphasized. An analysis of reports seems to prove that embolism occurs no more frequently after normal rhythm has been restored than while the auricles are in a state of fibrillation. On the contrary, quinidine has been used for the specific purpose of restoring normal rhythm and preventing the formation of more auricular thrombi in patients subject to embolic phenomena. Furthermore, the consensus of clinicians seems to be that, with other conditions favorable, quinidine may be used regardless of the length of time fibrillation has been present in the auricles. The former thought that fibrillation of long standing, of itself, offers a contraindication to the use of the drug has been refuted.

Another criticism of its use has been the supposed frequent occurrence of cardiac standstill and sudden death. Again, the experience of the majority of investigators seems to be con-

vincing that this complication is relatively rare when the drug is judiciously employed.

Perhaps the more important contraindications to the use of quinidine in auricular fibrillation are severe congestive heart failure and old age. Patients in the middle-age group with mild congestive failure, however, may be greatly benefited and their tolerance of exercise considerably improved with quinidine therapy. These patients may be digitalized first, with precaution against over-digitalization, and quinidine may then be administered. The drug should not be used in cases of severe hypertension nor in the treatment of patients with a great degree of cardiac enlargement.

Younger patients with auricular fibrillation of so-called idiopathic origin are excellent subjects for the use of quinidine. Hyperthyroid patients who have persistent fibrillation after surgery should be given the benefit of quinidine therapy. Other things being equal, mitral disease is not a contraindication, and in selected cases quinidine should be used.

It is my custom to give a test dose of quinidine before prescribing a regimen planned to restore normal rhythm. This consists of 3 grains of the drug given in tablet or capsule form. If feasible, a period of twenty-four hours is allowed to elapse before more quinidine is administered. On occasions, I have waited only an hour or two before giving a full dose. If no untoward symptoms have occurred after a decided period of hours, the drug is given in doses of 6 grains every two hours for six or more doses, or until normal rhythm has occurred. The dose is reduced rapidly then to 12 grains every twenty-four hours in doses of 3 grains four times daily. Later, a maintenance dose of 9 grains daily may be tried.

REPORT OF CASES

Case 1. — F. G., a white man aged 65, was first seen on April 9, 1940. The diagnosis was valvular cardiac disease, mitral insufficiency, auricular fibrillation and mild congestive heart failure. The history was not clear as to etiology. The patient had been told in 1907, following an attack of "pleurisy," that the action of the heart was irregular. He had been conscious of an arrhythmia ever since. Symptoms of congestive heart failure had been intermittent and mild over a period of about two years. He had been digitalized and was on a maintenance dose of 1 cat unit daily. Electrocardiograms gave evidence of auricular fibrillation, left axis deviation and slight effect of digitalis.

The patient was next seen on July 1. There were no symptoms nor signs of congestive heart failure. Electrocardiograms again indicated the presence of auricular fibrillation and effect of digitalis, also left ventricular preponderance and ventricular premature beats. He was hospitalized, and the administration of digitalis was discontinued. On July 6 a test dose of 3 grains of quini-

dine sulfate was administered. The ventricular rate had been about 80 per minute with a pulse deficit of about 30 or 40 beats. The following day he was given 6 grains of quinidine every two hours for eight doses. The cardiac rate remained at 80 per minute. The pulse showed a skipped beat about every fifth or sixth heart cycle. The amount of quinidine administered was reduced to 6 grains every four hours for four doses when the pulse showed a skipped beat every 15 or 20 heart cycles. The dose of quinidine was then gradually reduced to 3 grains four times daily. Electrocardiograms on July 13 gave evidence of regular rhythm, first degree heart block with a PR interval of .22 second and left axis deviation; there was still some effect of digitalis. He was discharged from the hospital two days later.

The patient was next seen on December 23. He had been symptom-free and had continued to take 9 grains of quinidine daily. Electrocardiograms indicated normal rhythm; the PR interval was .20 second. The direction of the electrical axis was normal. When he was last seen on April 10, 1941, there were no signs of congestive heart failure. The cardiac rhythm was normal. He is still taking 9 grains of quinidine daily.

Case 2.—J. S. W., a white woman aged 52, consulted me on Jan. 10, 1941, because of breathlessness and irregular action of the heart. There was a history of acute congestive heart failure two months previously, with improvement on medication with digitalis. There were no signs of congestive heart failure. The blood pressure was 153 systolic and 92 diastolic. Auricular fibrillation was diagnosed and confirmed by electrocardiograms. The ventricular rate was 65 per minute. The patient was hospitalized, and treatment with digitalis was discontinued. Two days later a test dose of quinidine was given. The following day she was given 6 grains of the drug every two hours for six doses, and the cardiac action became regular. The dose was reduced to 6 grains every six hours for three doses and then was gradually reduced to 3 grains three times daily.

Electrocardiograms on January 16 gave evidence of regular rhythm and a first degree heart block, the PR interval being .22 second. The patient was symptom-free. A check-up on February 20 revealed regular cardiac rhythm and no signs of congestive heart failure. Electrocardiograms indicated a PR interval of .19 second and a regular sinoauricular nodal rhythm. The patient was not taking digitalis, but was on a daily dose of 9 grains of quinidine.

Case 3.—E. D. P., a white married woman aged 68, was first seen on October 22, 1940. She had complained of attacks of palpitation for a period of three or four months and had been conscious of an arrhythmia for the last several days. There was a history of positive blood Kahn test several years previously. She had been on antisyphilitic therapy. The Kahn test in October 1940 gave negative results. There were no signs of syphilitic disease. The blood pressure was 126 systolic and 72 diastolic. The presence of auricular fibrillation was revealed on physical examination and confirmed by electrocardiograms. There were no signs of congestive heart failure. The patient was given a test dose of quinidine sulfate, and the next day a regimen of 6 grains every three hours for five doses was ordered. The action of the heart was then normal and regular. The administration of 3 grains four times daily was started, but the cardiac action became irregular again in about forty-eight hours. The dose was increased to 6 grains every three hours for five doses daily, and this treatment was continued for a period of one week with no effect on the fibrillation. Unfortunately, hospitalization and strict supervision were not feasible. Quinidine was discontinued, and digitalis therapy was instituted. Fibrillation continues, but the patient has not had congestive heart failure.

Case 4.—W. K., a white man aged 77, when first seen on Feb. 10, 1941, complained of weakness and breathlessness on exertion. He was not conscious of an arrhythmia, but he had been told on January 7 that he had auricular fibrillation and congestive heart failure.

He had been digitalized and was on a daily ration of 1 cat unit. Electrocardiograms made on January 7 and February 7 had given evidence of auricular fibrillation.

Examination revealed the presence of a considerable degree of generalized arteriosclerosis. The blood pressure was 114 systolic and 56 diastolic. Moist rales were heard in the lower lobes of both lungs, but no other signs of congestive heart failure were noted. Quinidine therapy was recommended. The patient was given 6 grains of quinidine every two hours for eight doses, and the following day he received 6 grains every four hours. The action of the heart had become regular. The dose was gradually reduced to 10 grains daily. He was next seen on March 8, at which time there were no signs of congestive heart failure. Electrocardiograms indicated normal rhythm, sinus bradycardia of 55 per minute and first degree heart block with a PR interval of .22 second.

Case 5.—F. T. W., a white married woman aged 58, was first seen on Aug. 11, 1939. There was a history of transient attacks of arrhythmia since the age of 20. She had had a partial thyroidectomy when aged 26 and a second thyroid operation when aged 53. There were no signs of hyperthyroidism. The basal metabolic rate was normal. There was no evidence of arteriosclerosis. The blood pressure was 150 systolic and 92 diastolic. There were no signs of congestive heart failure. Auricular fibrillation was present with a cardiac rate of 100 per minute. An electrocardiogram made on November 14 indicated auricular fibrillation and premature ventricular beats. Digitalis therapy was instituted and continued.

On July 12, 1940 the patient was given 3 grains of quinidine sulfate as a test dose and on the next day she received 6 grains every two hours for seven doses. The following morning the cardiac rate was regular, and the dose was reduced to 3 grains four times daily. Medication with digitalis was also continued. Electrocardiograms on August 2 indicated normal rhythm. In September she began having diarrhea and anorexia. In November the quinidine was discontinued, but a daily ration of digitalis was maintained.

The patient was next seen in February 1941. Auricular fibrillation had recurred. An electrocardiogram on March 18 gave evidence of auricular fibrillation and the effect of digitalis. She was complaining of palpitation and breathlessness. Quinidine therapy was repeated in essentially the same dosage as previously, and on March 21 electrocardiograms indicated normal sinoauricular nodal rhythm with evidence of the effect of digitalis. The patient was more comfortable. She has been able to continue taking 12 grains of quinidine daily without untoward effects.

Case 6.—D. B., a white married woman aged 64, when first seen on June 4, 1940, complained of shortness of breath and swelling of the lower extremities. Examination revealed generalized arteriosclerosis, a blood pressure of 184 systolic and 98 diastolic, congestive heart failure and auricular fibrillation. There was a history of irregular action of the heart for a period of about one year. Electrocardiograms demonstrated the presence of auricular fibrillation, premature ventricular beats and the effect of digitalis. She was hospitalized and continued on a regimen of digitalis therapy. On July 2 a test dose of quinidine was administered, and on the following day she was given 6 grains every two hours for five doses. The cardiac action became regular, and the dose was changed to 3 grains every six hours and then to 3 grains four times daily. Electrocardiograms on July 17 indicated normal rhythm. The patient was discharged from the hospital. She was next seen in December 1940. She had continued the use of quinidine. She was suffering from congestive heart failure, and fibrillation was present. She died of congestive heart failure on Jan. 1, 1941.

Case 7.—L. G., a white man aged 54, was admitted to the hospital on Dec. 29, 1940, because of lobar pneumonia. There was a history of irregular action of the heart for a period of three years. There were physical

signs of consolidation in the lower lobe of the left lung. Auricular fibrillation was present. The patient was given sulfapyridine, and digitalis therapy was also administered. The response to the chemotherapy was highly satisfactory. On Jan. 6, 1941, electrocardiograms gave evidence of auricular fibrillation and numerous premature ventricular beats. Quinidine sulfate was given in doses of 3 grains every four hours day and night for a period of eleven days. Electrocardiograms on January 17 again indicated auricular fibrillation. The dose of quinidine was increased to 6 grains every two hours. After 6 doses the cardiac rhythm became regular, and the dose was reduced to 6 grains every four hours. Electrocardiograms made on January 20 indicated a normal sinoauricular nodal rhythm. The patient was discharged on a maintenance dose of 12 grains of quinidine daily.

SUMMARY

A brief resume of the more recent conceptions of the indications and value of quinidine sulfate in the treatment of auricular fibrillation has been given.

A report of 7 cases has been presented. Good results were obtained in 4 cases. In 2 cases normal rhythm was restored in patients who subsequently discontinued the drug with recurrence of fibrillation. One of these patients experienced restoration of normal rhythm on a second regimen of quinidine; the other patient succumbed to congestive heart failure. In 1 case the patient failed to respond to quinidine therapy.

CONCLUSIONS

Quinidine sulfate is of definite value in the treatment of auricular fibrillation.

The risk of an embolus occurring as normal rhythm is restored has been over-emphasized.

Appreciable clinical improvement follows the restoration of normal rhythm.

Adequate dosage is necessary to obtain the desired effect of the drug.

357 St. James Bldg.

DISCUSSION

DR. WEBSTER MERRITT, Jacksonville: It has been a real pleasure to hear Dr. Limbaugh's paper this morning. I think two things impress one immediately, the scholarly presentation and the timeliness of the subject.

Even the younger men in the group here, of whom I am one, remember being taught that great dangers may be associated with the giving of quinidine in the treatment of chronic or long-standing auricular fibrillation. Particularly stressed was the danger of the formation of an embolus to which Dr. Limbaugh referred.

Now the theory of the formation of emboli is an interesting one. The old theory in the textbooks, which is under question, is that when there is fibrillation of the auricles, the flow of blood becomes sluggish and emboli form much more readily in the auricles. Hence in long-standing auricular fibrillation, said the older workers, one should with great caution give quinidine and cause the cardiac rhythm to revert to normal. Apparently there is a much more important factor in the formation of emboli in the heart than auricular fibrillation. That factor is injury of the cardiac endothelium. If the endothelium is injured, it is known that thrombi often are produced

whether or not fibrillation is present. Hence the role which long-standing auricular fibrillation plays in the formation of thrombi, some believe, may have been over-emphasized. Within the last few months I recall seeing two cases of peripheral embolus in which the emboli were thought to have originated within the heart, one being cerebral and the other femoral. In both cases auricular fibrillation was still in progress. Perhaps the formation of emboli is more frequently observed in the patient in whose auricles fibrillation persists than in the patient whose cardiac rhythm has been restored to normal.

As Dr. Limbaugh outlined, I think it is important that one remember that administering quinidine is somewhat parallel to administering quinine, although administration of the latter causes little apprehension. Some persons, rarely of course, have decided idiosyncrasy to quinidine, manifested by diarrhea and abdominal distress. Extreme nausea, particularly in the cases in which the patients have cardiac symptoms, might prove to be serious. Hence the preliminary or test dose is given to see whether or not a patient tolerates quinidine well. It is probably better to wait twenty-four hours after the preliminary dose, though many proceed within six or eight hours if no untoward symptoms have occurred.

Digitalis should be used first in the treatment of those patients who suffer from decompensation. Some physicians believe it is wise to give digitalis first in every case whether or not there is decompensation or cardiac enlargement.

Quinidine tends to be rapidly excreted; hence at the beginning of the period of administration it is given every four hours. Later in maintenance doses it may perhaps be given three or four times a day.

One thing that impressed me in the slides shown by Dr. Limbaugh was that the electrocardiograms demonstrated changes not only in the rhythm, but also in the contour of the T waves. In following a series of electrocardiograms, one finds that immediately after normal rhythm has been restored, the T waves may still be inverted, or they may be diphasic or low and abnormal, but after regular rhythm has been maintained for a matter of weeks or months, these T waves begin to look more nearly normal. This change indicates that the circulation in the myocardium is better after normal rhythm has been established than it was when auricular fibrillation was in progress. This effect alone is sufficient to make one realize the importance of this drug.

When a patient with long-standing auricular fibrillation suffers from decompensation, breathlessness and palpitation, and is able to get around little in spite of full doses of digitalis, it seems to me one is justified in trying quinidine. Under such conditions, normal rhythm is occasionally restored, and the patient takes on some activity; that is the reward for trying the therapy. Good results are not obtained in every case by any means. But when one sees such a patient, he certainly feels that the drug has been worth the trial.

DR. E. STERLING NICHOL, Miami: Dr. Limbaugh has aptly set forth the advantage of using quinidine sulfate in auricular fibrillation. I wish only to amplify some of his statements.

Some clinicians doubt that it is desirable to restore normal rhythm in cases of auricular fibrillation owing to the difficulty encountered in preventing relapse into auricular fibrillation later on. This doubt should be dispelled by a number of recent follow-up studies showing that in from 25 to 60 per cent of the cases regular rhythm is maintained over a period of four or five years or even longer, particularly if quinidine is continued in small doses after normal rhythm ensues.

Another reason which has been advanced for questioning the merit of restoring normal rhythm is that congestive failure often responds better to digitalization in the presence of auricular fibrillation than in the presence of sinus rhythm. Although it is true that signs of failure often disappear more easily with digitalis therapy

if auricular fibrillation exists, it should be pointed out that the onset of auricular fibrillation precipitates congestive failure in many cases.

The early disappointment with quinidine therapy came because (1) cases were not properly selected; (2) inadequate dosage was prescribed; (3) previous digitalization was not employed in cases of congestive failure; or (4) quinidine was not continued long enough after the restoration of normal rhythm.

Conditions favoring the use of quinidine in auricular fibrillation are as follows: (1) auricular fibrillation of less than one month's duration; (2) absence of gross cardiac pathologic changes; (3) absence of congestive failure; (4) youth or middle age; (5) auricular fibrillation persisting two weeks after subtotal thyroidectomy. Conditions less favorable, but still amenable to trial with quinidine therapy are: (1) mitral stenosis without great increase in the size of the auricles; (2) mild congestive failure; (3) auricular fibrillation of more than one month's duration.

Definite contraindications to using quinidine in auricular fibrillation are: (1) previous embolic manifestations; (2) heart block; (3) severe hypertension; (4) hyperthyroidism preliminary to surgery; (5) advanced mitral stenosis with large auricles; (6) grave organic cardiac disease of any etiology with severe failure; (7) old age; (8) idiosyncrasy to drugs; (9) active infection.

DR. JOSEPH HALTON, Sarasota: I think for a subject as big as the one just presented there should be a good deal of time granted for discussion. If the medical profession realized how coronary disease is spreading among its members, this room would be packed with the members of this Association. I know of no more live subject today than coronary disease.

I am not going to discuss this paper; neither am I going to read anything original. I have, however, spent much time in closely observing cases of coronary disease. I will dismiss quinidine sulfate with one statement. It has been damned by slight praise.

In Boston last year I saw Dr. Paul White, who has observed 500 cases of coronary disease over a period of ten years. He made the statement that 25 per cent of the patients died within the first six weeks, that 80 patients died within the first twelve months and that the remainder were alive at the end of ten years.

At the congress in Washington on cardiovascular-renal diseases a series of 150 cases observed over a period of five years was reported by an author who observed that it makes no difference whether the patient goes back to work in moderation or sits down and does nothing. After he has had one attack he never knows when he is going to have another. The life of any man who has coronary disease undergoes a complete change.

Five sins contributory to coronary disease are coffee, tea, coca cola, alcohol and tobacco, but the greatest of these is tobacco. That statement always starts an argument. If one does not believe that tobacco has a vasoconstrictive effect, he need only go to the Massachusetts General Hospital and there he will see 75 or 80 cases of Buerger's disease. In some of these cases the patients have had amputations (some have been there for six years) until they have neither arms nor legs left, but they are not smoking.

Now, in regard to the electrocardiograph, the interpretation of electrocardiograms by the neophyte takes us back to the early days when physicians tried to interpret roentgen shadows. It is a difficult proposition, but not impossible for many practitioners to have an electrocardiograph. One may get a little book and work out its problems, but it is necessary to become familiar with the mechanics of the machine first. Fortunately for some, there are places where for a dollar or a dollar and a half one may send electrocardiograms by air mail and get an interpretation back within four days.

I did not intend to say much about this subject, but I think the time is ripe, and all should know more about the study and handling of coronary disease.

DR. LIMBAUGH (concluding): I appreciate the discussions that have been given.

I am glad that Dr. Merritt brought out the changes in the T wave. I tried to run on a streamlined schedule and could not go into some of the details.

I also appreciate Dr. Nichol's discussion. Of course his list of contraindications varies a bit from mine. I happen to have patients who have had repeated embolic phenomena, and they were given quinidine with the express purpose of restoring normal rhythm in the hope of preventing more emboli. Cases have been reported in which this treatment apparently was successful in reducing embolic phenomena.

The youngest patient in this series was 52 and the oldest 77. Other than for the fibrillation, the general condition of this oldest patient was relatively so good that giving him the drug seemed justified.

Dr. Halton was a bit off my original subject, but I agree with him that it is a pertinent time to discuss the matters mentioned. What he said is extremely interesting. The effect of tobacco could bring on talk. My impression is that it has been shown that the effect of nicotine is greater on the distal peripheral arterioles of the extremities than on any other arteries in the body.

I wish to thank all who have participated. I appreciate the discussions very much.



THE USE OF COBRA VENOM AND OXYGEN IN THE CONTROL OF CARDIAC PAIN

KARL HANSON, M.D.
JACKSONVILLE

Cobra venom for the control of pain was first studied scientifically in 1929, according to Macht.¹ Since that time he has made extensive studies as to its effect on chronic pain. This venom has no local anesthetic effect, he observed; the action is on the higher centers of the brain. It has been shown to be effective in about 70 per cent of the cases of long-existing pain, particularly that due to carcinoma. This author reported its use in 2 cases of angina pectoris, but made no mention of the results.

Shortly after Macht's article appeared, I used it in the treatment of a patient with hypertensive cardiac disease, who also had frequent attacks of angina pectoris. This patient was a white man aged 45. He was first seen in 1936. At that time, a diagnosis of hypertensive cardiac disease and angina pectoris was made. The blood pressure was 262 systolic and 132 diastolic, and there was great enlargement of the heart. He was treated with sedatives and aminophylline. Nitroglycerin was given under the tongue for the angina. The usual dose was 1/100 grain as required. In March 1937 he was digitalized. The substernal attacks of pain continued to recur; therefore, in May he was given intramuscularly

Read before the Third Annual Meeting of the Florida Section of the American College of Physicians, Jacksonville, April 28, 1941.

a course of treatment with tissue extract, after which he obtained some temporary relief. Almost continuously during 1938 the patient suffered from congestive heart failure of varying degree and continued to have attacks of angina pectoris and epigastric pain. He was given prolonged bed rest and as much as 3 grains of morphine daily.

In consequence, I decided to try cobra venom. He was given intramuscularly $\frac{1}{2}$ ampule or $2\frac{1}{2}$ mouse units the first day and 1 ampule or 5 mouse units daily thereafter for five days. He was then given 1 ampule every two or three days. With this routine treatment it was possible to reduce the dose of morphine to $\frac{1}{12}$ or $\frac{1}{16}$ grain three or four times daily. The patient stated he was more comfortable on this routine. When he left town about one month later, he was continuing this treatment. He died two months later of congestive heart failure.

The second patient who received cobra venom was a 30 year old white woman first seen in 1936. A diagnosis of hypertensive cardiac disease was made at that time. During the next three years the patient had congestive heart failure on numerous occasions. In 1939 she became much worse, having symptoms almost constantly. Because of severe dyspnea, orthopnea and epigastric pain, which did not respond to digitalis and diuretics, she received increasing doses of morphine, dilaudid, or pantopon. By August 1939 she required an average dose of 3 grains of morphine, or its equivalent, daily by hypodermic injection and even then did not receive complete relief.

At this time I decided to give the patient cobra venom. She was given intramuscularly an initial dose of $\frac{1}{2}$ ampule or $2\frac{1}{2}$ mouse units and then 1 ampule daily for five days. Thereafter the dose was 1 ampule every second day. The dose of morphine, or its equivalent, was reduced gradually so that she took only $\frac{1}{4}$ grain twice daily. The interval for the administration of cobra venom was increased to four days, but it was found that she felt better when it was given every second day. She continued to take the venom for a period of nine months. It was discontinued because increasing amounts of pantopon were needed to control the dyspnea. The pain remained well controlled until the last month before the venom was discontinued. During the last six months of this therapy compensation was fairly well established but it was necessary to administer about 1 grain of pantopon a day. The patient died suddenly about three weeks

ago of cerebral hemorrhage.

In my opinion there can be no doubt but that both of these patients obtained definite therapeutic effects from the cobra venom. The result in the first case was immediately more satisfactory because the patient obtained a greater sense of well being and his appetite improved considerably. In the second case, the main improvement was the control of the severe pain. In neither case was there demonstrable effect on the dyspnea or orthopnea. These two cases suggest that patients having persistent severe pain resulting either from angina pectoris or from venous engorgement of the viscera may obtain some degree of relief from cobra venom. Treatment with the venom allows the patient more comfort without the bad effects of large amounts of opiates, which are particularly depressing to the appetite and to normal peristalsis of the gastrointestinal tract. It certainly has no value as far as the heart failure itself is concerned, nor is it of use in relieving the dyspnea. We might surmise that by relieving the pain and increasing the sense of well-being the frequency of the attacks of dyspnea would be decreased.

The dosage as outlined by Macht¹ and later by Greenhill² was to give $\frac{1}{2}$ ampule or $2\frac{1}{2}$ mouse units on the first day. On the following day, a whole ampule or 5 mouse units was given. On each succeeding day, 1 or 2 ampules or 5 or 10 mouse units was given for from four to seven days, or until definite relief of pain was obtained. Relief was usually noted after from three to seven days. If no response was obtained after seven days, in the opinion of these authors it was not likely to occur. Once a response has been obtained, 2 or 3 ampules of 5 mouse units each per week will usually suffice. Cobra venom is not habit-forming, nor does it produce any toxic change in the body when given in therapeutic doses. It may be given indefinitely. The opiate, if it has been given in large doses, should be reduced gradually as in the cases cited.

A third patient, a 69 year old white woman, has been treated by Dr. Louie Limbaugh for diabetes mellitus since 1927. In 1939 she began having angina pectoris. An electrocardiogram at that time gave evidence of a left bundle branch block. The attacks of angina occurred with gradually increasing frequency until May 1940. At that time she had an attack as often as two or three times an hour. Two or three $\frac{1}{100}$ grain nitroglycerin tablets were required to relieve each attack. Treatment with oxygen was given

a trial with the patient using a BLB nasal mask. She was instructed to keep the flow at 7 to 9 liters per minute, thus giving a concentration of from 85 to 100 per cent. She was told to use the oxygen when she felt the pain coming on and to keep taking it for fifteen or twenty minutes after the pain had stopped. The patient stated she obtained relief from the pain much more quickly than with the use of nitroglycerin. Since that time she has made considerable improvement. Since the first ten days after she started using the BLB mask, she has had only three or four attacks of angina a week. The effect was so good that she keeps a tank of oxygen in her hotel and one in her daughter's home where she goes to visit. This case is a simple illustration of the value of oxygen in treating angina pectoris, and it also illustrates the use of a simple and economical means of administering it. It was not difficult to teach the patient to use the mask, and anyone who was with her could set the flow at the proper rate. The cost is reasonable. A large tank will last a week or more, depending, of course, on the frequency of its use.

Boothby, Mayo and Lovelace,³ Barach and Cromwell,⁴ Fine, Hermanson and Frehling,⁵ and others have shown that pure oxygen is a non-irritating gas when inhaled over a period of one or two days. The use of oxygen in a concentration of 100 per cent has greatly enhanced the efficiency of its use as a therapeutic agent. Boothby, Mayo and Lovelace³ and Fine, Hermanson and Frehling⁵ have shown that its use in the normal person will increase the concentration of oxygen in the blood by 10 to 15 per cent.

The BLB mask is equipped with a rubber sponge inhaling-exhaling valve, which can be removed easily for cleaning purposes. On inhaling, should there not be enough gas in the rebreathing bag, the remainder of the inhaled gases is obtained through the sponge rubber valve from the outside air. On exhaling, after the rebreathing bag becomes distended, the remainder of the expired gases, which contain the highest concentration of carbon dioxide, passes out of the rubber valve. With the use of this apparatus a concentration of carbon dioxide of less than 1 per cent remains in the inspired air, and enough moisture remains in the apparatus from the patient's previously exhaled gases to provide for a sufficiently high humidity.

In order to get a concentration of oxygen approaching 100 per cent, the mask must fit the

patient snugly, and the rate of flow of the oxygen must be between 7 and 9 liters per minute. A lower rate, such as 4 liters per minute, gives a concentration of 50 to 65 per cent. An important point in this connection was brought out by Boothby, Mayo and Lovelace,³ when they stated that in order to approach pure oxygen in inspired air, the rebreathing bag must not collapse completely during inspiration. Barach and Cromwell⁴ stated that in dyspneic patients a flow of 10 to 12 liters per minute is usually necessary for comfortable breathing and that if the flow drops below 6 liters per minute, the carbon dioxide in the inspired air often exceeds 2 per cent.

The use of a mask for this purpose seems to frighten some patients, and in such cases I feel that the fear produces more distress and angina than can be corrected by the oxygen. In selected cases, however, it is a very valuable aid in the treatment of angina pectoris.

BIBLIOGRAPHY

1. Macht, D. I.: Therapeutic Experiences with Cobra Venom, *Ann. Int. Med.* **11**:1824-1833 (Apr.) 1938.
2. Greenhill, J. P.: Control of Pain in Cases of Cancer, *M. Clin. North America* **25**:117-128 (Jan.) 1941.
3. Boothby, W. M.; Mayo, C. W., and Lovelace, W. R., Jr.: One Hundred Per Cent Oxygen; Indications for its Use and Methods of its Administration, *J.A.M.A.* **113**:477-482 (Aug. 5) 1939.
4. Barach, A. L., and Cromwell, H. A.: Recent Advances in Oxygen and Helium Therapy, with Special Reference to Treatment of Bronchial Asthma, *M. Clin. North America* **24**:621-632 (May) 1940.
5. Fine, J.; Hermanson, L., and Frehling, S.: Further Clinical Experiences with 95 Per Cent Oxygen for Absorption of Air from Body Tissues, *Ann. Surg.* **107**:1-13 (Jan.) 1938.

357 St. James Bldg.

QUININE AS A PROPHYLACTIC IN INFLUENZA

H. A. BARGE, M. D.
MIAMI

As physicians studying defense in regard to national health, it is well that we consider influenza, which was such a problem in the first World War. Many commentators have made the statement that more American citizens died during the influenza epidemic of 1917 than were killed or died of other causes in the United States Army during the World War. As we now have faster transportation by air, train and motor, it will be easier to spread an epidemic than it was in the last war. In Florida with people from all section of the country going to hotels, tourist camps, army camps and aviation fields, conditions are conducive to an epidemic; so it behooves us to look into the merits of the most

highly recommended drugs for the prevention or treatment of influenza.

As I have been very much impressed with the glowing reports of the success of quinine as a prophylactic in influenza and as my opinion is in agreement with these reports, I interviewed most of the busy practitioners in the malarial sections of North Florida at the last meeting of the Florida Medical Association in Jacksonville. Their views were in accord with these reports as their patients taking the regular quinine treatment for malaria hardly ever had influenza. Going further into the subject, I noted that 500 deaths per year in Florida are reported as being caused by influenza. They occur in years in which there is no epidemic.

No disease has had more complications than influenza as it may have a harmful effect on any organ or part of the body including the nervous system, spinal cord and brain. The cardiac muscles and nerves may be damaged to a serious extent. The eyes and ears may be seriously affected. Pneumonia may follow and cause death. Influenza leaves its victims very weak, and some take months to regain their strength. It is dangerous to old people, children and tubercular sufferers. There is a great increase in surgical cases due to complications of influenza.

In 1918 the number of deaths in tropical and subtropical countries was reported to be two to three times as high as in the United States. This mortality rate should be of interest to us in Florida.

In a report published in the Virginia Medical Monthly, Schnurman¹ stated that at the Radford Ordnance Works at Pepper, Va., where a powder plant was constructed, to avoid loss of time 6,500 men were given 5 grains of quinine daily for two weeks. A like number were given sodium bicarbonate. Among the group that took quinine only 32 cases of influenza or 20 per cent of the total number occurred. Among the other group 132 cases or 80 per cent were reported.

Showalter² demonstrated that quinine causes a definite leukocyte response. This is exactly what is needed to increase the defenses of the body during the initial stages of influenza when a leukopenia exists. Other writers emphasized the vasodilator effect of quinine and have reported good results with this therapy.

In the U. S. Dispensatory, 1937 edition,³ it is stated that in the influenza epidemic of 1918 numerous hospitals in Southern Europe reported that influenza was practically unknown among the

patients with malaria. Veilchenblau³ concluded from his experience during this epidemic that quinine was the only drug which produced a specific action that could be perceived. From my experience I am convinced that in the treatment of ordinary colds, if used early enough, quinine in the great majority of cases will completely abort the infection.

In the winters of 1923 and 1924 I was practicing among eight hundred families in a coal mining region, and during this time there were two small epidemics of influenza. I noticed that only Dover's powder in 5 grain tablets with quinine added would abort an attack of influenza if given early. In some of the cases in the early stages, the results were startling. At this time I did not know about using quinine alone. Since 1925 I have used quinine in conjunction with other drugs in treating the early and late stages of influenza. Thereby I have avoided most of the complications of this disease and am happy to report that pneumonia has not followed.

In reading the books on therapeutics, I observed that Bethea recommended quinine in conjunction with other drugs as a tonic in the treatment of subacute coryza, coryza, influenza and colds. Hare⁴ gave practically the same prescriptions.

Dr. W. C. Roberts of Panama City said that his late father and several colleagues in Dothan, Ala., used quinine in the early stages of pneumonia with a resulting low death rate. In Hare's⁴ Practical Therapeutics, 1892 edition, under the section on pneumonia there is the statement that quinine is a valuable drug if given in the period of rising temperature. McRae⁵ stated that administration of an alkaloid of quinine has brought about marvelous strides in the treatment of pneumonia.

I have examined the list of contents of the various cold and influenza tablets put up by the leading ethical drug houses, and they all contain quinine sulfate with the coal tar products and other ingredients.

In the dengue epidemic of 1935 in Miami I noticed that my patients who were given quinine and codeine soon recovered from the attacks with few complications while my close friends who tried home remedies had various complications, chief of which was weakness lasting several weeks or months.

CONCLUSIONS

It has been proved that quinine causes a leukocytosis and therefore is needed to increase the

body defenses during the initial stage of influenza when a leukopenia exists.

Reports indicate the incidence of influenza is much lower among quinized than among non-quinized patients.

Mention of the complications of influenza during the last World War was made to try to impress on the younger men the seriousness of the disease and the importance of considering quinine as a prophylactic in the early stage and as a valuable remedy in the treatment of the late stage or the early stage of pneumonia. Most of the leading books on therapeutics have recommended its use in the early stages of influenza and pneumonia for the last fifty years.

Many authorities have stated that influenza is practically unknown among patients with malaria who are taking the quinine treatment.

REFERENCES

1. Schnurman, A. G.: Quinine as Prophylactic Against Influenza: Study of 6,500 Quinized and 6,500 Non-quinized Individuals during Influenza Epidemic of January, 1941, *Virginia M. Monthly* 68:341-342 (June) 1941.
2. Showalter, A. M.: Effects of Quinine as Prophylactic Versus Influenza and Probable Reason, *Virginia M. Monthly* 68:15-20 (Jan.) 1941.
3. U. S. Dispensatory, 1937 edition.
4. Hare, H. A.: Hare's Therapeutics, 1922 ed.; Hare's Practical Therapeutics, vol. 2, 1892 edition.
5. Osler-McRae: Practice of Medicine, 1925 edition.

301 Olympia Bldg.

FRACTURES OF THE PELVIS

T. H. BATES, M. D.
LAKE CITY

Railway surgeons have always considered fractures of the pelvis as serious injuries. This view arises primarily because of the actual physical injury to the patient and secondarily because of the economic injury to the patient and the liability and loss to the railroad company.

Perhaps the best classification of fracture of the pelvis is the one suggested by Cubbins:¹

1. Those that involve the ring: (a) at one point of the circumference, (b) at two or more points of the circumference without displacement, (c) at two or more points with displacement upward of one side.
2. Fractures that involve bones entering into the formation of the ring, but the ring remaining firm and unbroken, i.e., the iliac crest or wing, the spine of the ilium, the tuberosity of the ischium, and the sacrum below the sacroiliac articulation.
3. Acetabular fractures: (a) involving the rim, (b) involving the three segments, (c) perforating.

The majority of pelvic fractures (about 70 per cent) are multiple. Over 75 per cent are simple fractures without important displacement of the

fragments.

The very nature of the pelvis, its shape and composition, make it essential that great force must come into play to produce fracture. Crushing injuries and falls, railway collisions, automobile and truck accidents, rock falls, quarry blasts and other accidents involving great force are responsible for most pelvic fractures. Isolated fractures of the anterior superior spine of the ilium, the iliac crest or the wing and avulsion of the ischiatic tuberosity, or fracture of the inferior rami of the pubis and ischium may be caused by less severe accidents such as kicks by animals, sports accidents and the like.

PATHOLOGY

Generally speaking the complicating injury of the soft tissue may be more serious than the fracture of the bony pelvis. Intrapelvic injuries of course constitute the most serious complications. Surgical shock is always present and may be so severe as to prove fatal. Treatment of shock is a primary step in the care of the patient in all accident cases.

Involvement of the urinary tract is frequently a major complication. Rupture of the bladder or urethra may result from the violence causing the fracture or may be the result of puncture by sharp bony fragments.

Visceral injury may vary all the way from contusion to rupture of the bowel or puncture by bony fragments. Serious damage to the blood vessels with resulting hemorrhage may occur and may even prove fatal. Injury to the nerves⁴ probably is more common than is generally recognized. The sacral plexus is the nerve group most often affected. Complications of pelvic fractures cause most of the deaths within the first twenty-four hours.⁵

In fractures involving the pelvic ring the bones forming the obturator foramen, the rami of the pubis and the inferior ramus of the ischium are the ones most often injured. The superior ramus of the ischium is seldom injured in this type of pelvic fracture, but it is not uncommon to find bilateral fracture through both obturator foramina.

In addition to the fracture through the foramen there may be a fracture through the posterior part of the ilium, the sacroiliac joint or the sacrum, and one entire side of the pelvis may be dislocated upward from $\frac{1}{2}$ inch to 3 inches. This is the so-called Malgaigne fracture and is always serious because the force necessary to cause it is so great. There is a high mortality, usu-

Read before the Twenty-First Annual Meeting of the Florida Railway Surgeons' Association, held in Tampa, April 29, 1940.

ally due to the other associated injuries in this type of fracture.

A fracture line through the posterolateral portions of the pelvis may be associated with a separation of the symphysis pubis instead of a fracture through bones forming the obturator foramen, and there may be a more or less true sacroiliac dislocation. This type occurs infrequently.

Fractures of the iliac crest are common, while avulsion of the anterosuperior spine¹ of the ilium or the epiphysis of the tuberosity of the ischium is uncommon. Fractures of the acetabulum are occurring more frequently, perhaps because of the increase in the speed and volume of motor traffic. This classification of acetabular fractures seems adequate: (1) simple fractures of the acetabulum without displacement; (2) central dislocations at the hip; (3) fractures of the rim of the acetabulum with or without dislocation of the hip; and (4) perforating fractures with dislocation of the head of the femur into the pelvis.

SYMPTOMS

Disability generally is instant and complete due to pain, shock and deformity. The pain of course is caused by the involvement of nerves at the site of the injury, and the shock^a may be out of proportion to the bony injury.

Deformity may show by swelling and ecchymosis over the site of injury and may show malalignment of the anterior superior spine or iliac crest. Crepitus, motility and local pain can often be elicited; pain transmitted by lateral pressure over the buttocks or through the thigh is highly suggestive. Rectal or vaginal examination frequently gives confirmatory evidence. An ecchymosis along the perineum that diffuses into the upper and inner thigh and over the scrotum is pathognomonic.

Roentgen examination may be the only means of determining positively a fracture of the pelvis and is always the method of demonstrating the position of fragments. It is important to bear in mind that persons severely injured require detailed examination and careful treatment of shock as well as roentgen examination, and it is particularly important that any examination be carried out with gentleness.

No examination should be considered complete without examination of the urine. The presence of bloody urine calls for a determination of the source of bleeding. If there is frank bleeding from the penis, a catheter should be passed, if possible, to determine whether there is a rup-

ture of the urethra. When there is a rupture of the bladder or hollow viscera, there will be present the usual signs and symptoms of acute peritonitis. The injection of a sterile solution of hippuran,⁷ a substance opaque to roentgen rays, permits a cystogram to demonstrate positively the presence or absence of a rupture of the bladder.

Fractures of the acetabulum of a minor type may not be readily diagnosed except by repeated roentgen examination. When there is a severe central fracture with displacement of the head of the femur into the pelvis, flattening of the trochanteric area and limitation of motion occur with severe pain on abduction or any other movement of the thigh. Rectal examination reveals tenderness high up on the injured side, and more or less boggiess due to extravasated blood and fluid from the joint is observed.

TREATMENT

Any consideration of treatment of fractures of the pelvis must be divided into a consideration of (1) those fractures with complications and (2) those without complications.

As previously mentioned, treatment of shock is a primary procedure. The liberal use of morphine, atropine and external heat, and the intravenous administration of glucose and saline solution are our standbys. Following the institution of antishock measures, treatment of other complications is taken up. If intraperitoneal rupture of the bladder or an intraabdominal visceral lesion is suspected, laparotomy should be performed as soon as the condition of the patient allows.⁸ Intraabdominal damage is repaired as indicated by the nature of the injury, and an appropriate drain is placed as needed. Damage to the urethra calls for suture over an indwelling catheter, while extraperitoneal rupture of the bladder requires suture and drainage. Following the treatment of complications, treatment of the fracture itself is undertaken.

In that large group of cases with little or no displacement of bony fragments, rest in bed with a simple pelvic swath of adhesive tape or a muslin binder is sufficient. The knees are elevated on pillows, and slight flexion of the thigh is thus afforded. When there is slight displacement of the fragments, the thighs and legs may to advantage be suspended in cradle splints of the Hodgen type with sufficient traction to overcome the displacement of the bony fragments.

Gross displacement of large fragments calls for correction if possible. Reduction of dis-

placement should be attempted by traction and countertraction, and manipulation under anesthesia where necessary. The use of the Murphy sling, which I enthusiastically reported on some years ago,⁹ is still a most satisfactory method of treatment in a large number of cases of this type. When it is combined with traction on the legs, this suspension is one of the most comfortable dressings that can be applied. The use of the sling and traction should be persisted in for from five to seven weeks. The sling is then removed, and after another two weeks the patient is allowed to be up in a chair and gradually to use crutches.

Numerous procedures have been advocated for the treatment of pelvic fractures, some of which have definite value. For use in those cases in which there is great overriding of the pubes, the ingenious use of plaster casts applied to both legs with the incorporation of two turnbuckles is described by Jahss.¹⁰ One long widely opened turnbuckle is placed so that it joins the two casts just above the malleoli, and a short closed turnbuckle joins the casts about 4 inches from their upper end. When the casts are well hardened, the upper turnbuckle is opened and the lower one is partly closed, thus forcing the overriding bones apart and allowing them to resume their normal position. The same apparatus can be used to force widely separated fragments of the pubis back into position by simply reversing the procedure as to the opening and closing of the turnbuckles.

Jones¹¹ used the lateral recumbent position for reduction of the dislocation present in fractures of the pubis with fracture dislocation of the sacroiliac joint. With the fracture reduced, a double spica plaster cast is applied while the patient is still in the lateral recumbent position.

In only about half of the cases of fractured pelvis is there what may be termed good anatomic position when the patient is discharged. On the other hand, in the great majority of cases there are good functional results. Even obstetric deliveries are not greatly interfered with,¹² and when interference is threatened, the alert obstetrician resorts to cesarean section.

CONCLUSIONS

Fractures of the pelvis are serious injuries usually involving more than one bone.

Complications demand priority in the scheme of treatment.

The simple uncomplicated fracture of the pelvis responds well to simple methods of treat-

ment.

Suspension and traction still offer the most satisfactory method of treatment for the majority of pelvic fractures.

The lack of anatomically good results does not prevent satisfactory function.

BIBLIOGRAPHY

1. Cubbins, W. R.: Fractures of the Pelvis, *North-west Med.* 35:63-67 (Feb.) 1936.
2. Leydig, S. M., and Key, J. A.: Treatment of Fractures of Pelvis, *Surg., Gynec. & Obst.* 69:508-514 (Oct.) 1939.
3. Peters, C. N.: Urological Complications of Fracture of the Male Pelvis; Report of 5 Cases, *Maine M. J.* 29:45-47 (March) 1938.
4. Lam, C. R.: Nerve Injury in Fracture of the Pelvis, *Ann. Surg.* 104:945-951 (Nov.) 1936.
5. Turberville, J. I.: Fractures of the Pelvis; Report of 7 Cases and Their Treatment, *J. Florida M. A.* 26:447-451 (March) 1940.
6. Michel, H. M.: Fracture of the Pelvis, *South. M. J.* 24:263-265 (March) 1931.
7. Greene, J. J., and Smith, D. H.: Fractures of the Pelvis; Analysis of 79 Cases, *Arch. Surg.* 38:830-852 (May) 1939.
8. Noland, L., and Conwell, H. E.: Fractures of the Pelvis; Summary of Treatment and Results Attained in 185 Cases, *Surg., Gynec. & Obst.* 56:522-525 (Feb. No. 2A) 1933.
9. Bates, T. H.: Fractures of the Pelvis; Their Treatment by Murphy Sling, *J. Florida M. A.* 16:68-71 (Aug.) 1929.
10. Jahss, S. A.: Injuries Involving Pelvis, *Am. J. Surg.* 43:394-403 (Feb.) 1939.
11. Jones, R. W.: Dislocations and Fracture — Dislocations of the Pelvis, *Brit. J. Surg.* 25:773-781 (April) 1938.
12. Boorstein, S. W.: Fractures of True Pelvic Ring; Review of 100 Cases Treated at Fordham Hospital 1918-1928 (Statistics and Discussion of Treatment). *Am. J. Surg.* 7:633-643 (Nov.) 1929.

27 West Madison St.

COMPENSATION IN INDUSTRIAL OPHTHALMOLOGY

NELSON M. BLACK, M. D.
MIAMI

The basis used by the committee on compensation of the American Medical Association for determining the visual efficiency of the patient following injury of the eye is:

(a) Total permanent disability of both eyes is identical with total permanent disability of the person. A person suffering such disability is entitled to the same compensation as that paid under the various state compensation laws for total permanent disability for other bodily injuries.

(b) Visual efficiency is synonymous and identical with visual efficiency of the person un-

Read before the Third Annual Meeting of the Florida Society of Ophthalmology and Otolaryngology, Jacksonville, April 28, 1941, and later corrected to conform to the report of the Committee on Compensation for Eye Injuries (Revised 1941) of the Section on Ophthalmology of the American Medical Association.

less visual efficiency of one eye is specifically mentioned. Hence, compensation for loss of vision should be that proportioned part of the compensation provided for by laws for total permanent disability which expresses the percentage loss of the visual efficiency of the person in pursuing a gainful occupation

PRIMARY AND COORDINATE FACTORS OF VISION

In order to determine visual efficiency one must study the primary factors, which, in normal relation and with perfect coordination, give the person what is known as standard or normal vision. The consensus is that (a) central visual acuity (for distance and near), (b) field of vision and (c) muscle function constitute the three primary factors. Although these interdependent factors are not of equal importance, no act of binocular single vision is perfect without the coordinate action of all.

Other functions, though secondary and dependent, are recognized as important, such as depth perception, stereoscopic vision, fusion sense, color perception, adaptation to light and dark, and accommodation. These functions are inherently dependent on the status of the three primary coordinating functions of vision, and they also depend on central nervous function.

Maximum visual acuity efficiency is expressed as follows: V 20/20 Snellen for distance and V 14/14 Snellen=J-1 at 14 inches for near is 100 per cent acuity. In other words, it is the ability to recognize at any distance letters or characters which subtend an angle of 5 minutes, each unit part of which subtends an angle of 1 minute.

The minimum limit of this function is established as the loss of light perception, light perception being qualitative vision. The practical minimum limit of quantitative visual acuity is established as the ability to distinguish form. Experience, experiment and authoritative opinion show 20/200 Snellen as 80 per cent loss of visual efficiency, 20/380 as 96 per cent loss, and 20/800 as 99.9 per cent loss.

CENTRAL VISUAL ACUITY EFFICIENCY

The best central acuity obtainable with correcting glasses shall be used in determining the degree of visual efficiency.

1. Determine the visual acuity for distance for each eye separately at 20 feet. Consult table 1 for the percentage of visual acuity efficiency for distance; for example, distance vision of

20/30 equals 91.5 per cent efficiency.

2. Determine the visual acuity for near for each eye separately at 14 inches. Consult table 1 for the percentage of visual acuity efficiency for near; for example, near vision of 14/49 equals 64 per cent efficiency.

The report of the Committee on Compensation for Eye Injuries (Revised 1941) of the Section on Ophthalmology of the American Medical Association contains a new basis of computation as follows:

The estimation of the visual acuity is based fundamentally on the ability to distinguish letters or characters on a standard test card at a distance of 20 feet, or 6 meters. The near visual acuity test is a means of verifying the claimant's reliability. Thus, if without reason in the judgment of the examiner the visual acuity for near is less than that admitted for distance, the distance findings should be the final expression. In certain conditions (uncorrected myopia) the visual acuity might be somewhat greater for near than for distance. In such cases the visual acuity for distance should stand. In other cases (such as high hypermetropia or cloudy media) the near visual acuity might be less than that for distance; then proper credit should be given the claimant — the average of the distance and near determinations given as final. For example, if the visual efficiency for near is 40 per cent and that for distance is 70 per cent, the central visual efficiency for the eye in question would be $\frac{40 + 70}{2} = 55$ per cent.

VISUAL FIELD EFFICIENCY

A visual field having an area which extends from the point of fixation outward 85 degrees, down and out 85 degrees, down 65 degrees, down and in 50 degrees, inward 60 degrees, in and up 55 degrees, upward 45 degrees, and up and out 55 degrees is accepted as 100 per cent industrial visual field efficiency. The minimum limit for this function is established as a concentric central contraction of the visual field to 5 degrees. Contraction of the visual field to this degree reduces the visual field efficiency to zero.

As specified in the revised report of 1941, visual field efficiency is determined in the following manner:

The amount of radial contraction in the eight field sectors, measured in their principal meridians, shall be determined. The sum in degrees of the eight principal radii of the visual field, which normally is 500, will give the visual field efficiency of one eye in per cent when divided by 5: a 1 per cent loss is thus found for a meridional contraction of 5 degrees for each of the eight sectors. The percentage loss may be computed thus: for example, if the field is contracted 20 degrees in all eight meridians there will be a loss of $20 \times 8 = 160$ degrees. This would amount to a loss of 160 divided by 5 = 32 per cent field efficiency loss for the eye in question. If the field is contracted down to 5 degrees in every meridian the loss will be found to be 95 per cent. Suppose the entire temporal field is lost, the loss will amount to $65 + 85 = 150 \div 5 = 30$ per cent. If the upper inner quadrant is lost, the loss of field efficiency will amount to $55 \div 5 = 11$ per cent, and so on.

MUSCLE FUNCTION EFFICIENCY

In the recently revised report the measurement of muscle function is defined as follows:

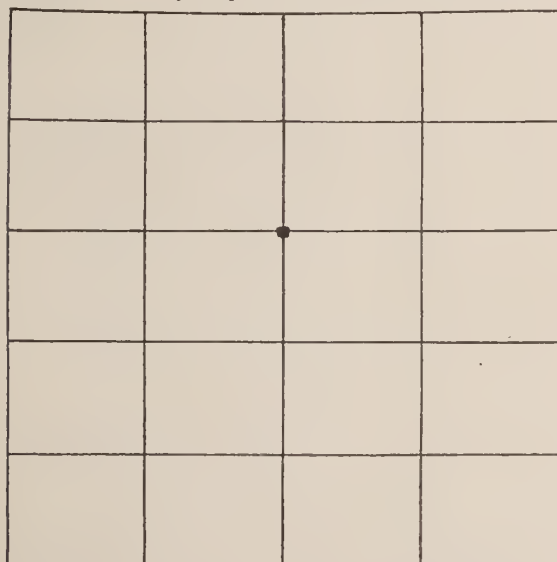
Muscle function shall be measured in all parts of the motor field, recognized methods being used for testing.

Traumatic strabismus (squint, heterotropia) may involve one or both eyes; this heterotropia is indicated by the presence of diplopia or by an inability of one or of both eyes to maintain fixation in some part of or in the entire normal motor field.

When diplopia is present, this shall be plotted on the motor field chart. This chart is divided into twenty rectangles 20 by 25 degrees in size, as shown in the chart. The partial loss to muscle function due to diplopia is that proportional area which shows diplopia as indicated on the plotted chart compared with the entire motor field area.

When the loss of muscle function cannot be determined by the presence of diplopia due to excessive degrees of strabismus and when it occurs in a one-eyed person, the degree of impairment must be determined by objective observation. The areas in which fixation is not possible shall be plotted on the motor field chart and the percentage loss of function computed by comparing the nonfixation areas with the entire motor field area. When there is total loss of binocular single vision, or when one eye is unable to fix on any point in the motor field, the percentage loss in visual efficiency is equivalent to the total loss and when the loss is partial the loss is proportional, based on the loss of use of one eye, provided the other eye has a normal field of fixation. Thus the loss of muscle function is rated as 5 per cent for each rectangle of the motor field in which there exists diplopia or loss of fixation.

In exceptional cases each eye may have its independent power of fixation impaired. In such cases the percentage loss of efficiency should be computed as a binocular disability as provided in Section VI.



Industrial motor field chart.

Diplopia or loss of fixation must be irremediable and based on the regulations as described in section VIII before compensation shall be awarded.

INDUSTRIAL VISUAL EFFICIENCY OF ONE EYE

Having determined the visual acuity efficiency, the visual field efficiency of each eye and the muscle function efficiency of the two eyes, all is now in readiness to compute the industrial visual efficiency of each eye. This is determined

by obtaining the product of the computed coordinate efficiency values. Thus if in the injured eye central visual acuity efficiency is 40 per cent, visual field efficiency 81 per cent and muscle function efficiency 100 per cent, the resultant industrial visual efficiency of the eye is $0.40 \times 0.81 \times 1.00 = 32.4$ per cent. Should the motor efficiency be reduced 50 per cent in the example given, the visual efficiency would be $0.40 \times 0.81 \times 0.50 = 16.2$ per cent.

INDUSTRIAL VISUAL EFFICIENCY OF THE PERSON

It is a fact well established by common experience that the visual efficiency of a person is by no means reduced to one half (50 per cent) by the complete loss of the vision of one eye, vision of the fellow eye remaining normal. Hence, there is the necessity for a weighted average. The researches of the committee show that a weighing factor of 3 applied to the more efficient eye gives an efficiency rating of the person in substantial agreement with the consensus of technical judgment; such judgment is based on actual reproduction, comparison and relative evaluation of various specific conditions of visual efficiency.

The industrial visual efficiency of the person is computed as follows: To the percentage figure which has been determined as the industrial visual efficiency of the less efficient of the two eyes, three times the percentage figure that has been determined similarly for the more efficient eye is added and the result is divided by 4. The quotient is the percentage figure that expresses the industrial visual efficiency of the person. Thus if the industrial visual efficiency rating of the injured eye is 27.3 per cent and that of the fellow eye is 100 per cent, the industrial visual efficiency of the patient is found by the following formula:

$$\frac{(27.3 \times 1) + (100 \times 3)}{4} = \frac{327.3}{4} = 81.8\%$$

Compensation then should be 18.2 per cent of the amount awarded for total permanent disability.

When it is known that there was present a preexisting subnormal vision, and injury causes an additional loss in visual efficiency, compensation shall be based on the loss incurred as a result of injury of the eye or occupational condition specifically responsible for the additional loss. In case there exists no record or no ade-

quate and positive evidence of preexisting subnormal vision, it shall be assumed that the visual efficiency prior to any injury was 100 per cent.

Dr. Leonard Greenburg (Chairman, Industrial Advisory Committee, National Society for the Prevention of Blindness; Executive Director, Division of Industrial Hygiene, New York

State Department of Labor, New York) summarized his paper on "The Economic Importance of Visual Disability in Industry" (J. A. M. A. 116:1357, Mar. 29, 1941) as follows:

"1. There occur approximately 300,000 accidental injuries to the eye in American industry each year.

2. There are approximately 60,000 such injuries each year for which compensation is made.

3. The direct cost of these injuries is approximately 30 to 37 million dollars each year.

4. The direct cost of some 240,000 non-compensable injuries of the eye resulting from accidents is approximately \$2,140,000 yearly.

5. The minimum indirect cost of these injuries is certainly equal to the direct cost, and the two together must, therefore, be a minimum of \$60,000,000 annually."

From the foregoing statement it appears that the necessity for a means of determining the visual efficiency of a patient following industrial injuries of the eye as a basis for estimating compensation is surely an economic factor of no little importance.

TABLE 1*

Percentage of Visual Efficiency Corresponding to Specified Notations for Distant and for Near Vision for Measurable Range of Quantitative Visual Acuity

SNELLEN NOTATION FOR DISTANCE	SNELLEN NOTATION FOR NEAR	SNELLEN OPTOTYPE, DIOPTER OR METER	JAEGER	PERCENTAGE VISUAL EFFICIENCY	PERCENTAGE LOSS OF VISION
20/20	14/14	6.37 D	1	100.0	6.0
20/25	14/17.5	.....	.....	95.7	4.3
20/30	14/21	0.50 D	2	91.5	8.5
20/35	14/24.5	0.62 D	3	87.5	12.5
20/40	14/28	0.75 D	4	83.6	16.4
20/45	14/31.5	.....	.....	80.0	20.0
20/50	14/35	0.87 D	6	76.5	23.5
20/60	14/42	1.00 D	8	69.9	30.1
20/70	14/49	1.25 D	9	64.0	36.0
20/80	14/56	1.50 D	10	58.5	41.5
20/90	14/63	.....	.....	53.4	46.6
20/100	14/70	1.75 D	11	48.9	51.1
20/120	14/84	2.00 D	12	40.9	59.1
20/140	14/98	2.50 D	14	34.2	65.8
20/160	14/112	3.00 D	16	28.6	71.4
20/180	14/126	.....	.....	23.9	76.1
20/200	14/140	3.50 D	17	20.0	80.0
20/220	14/154	.....	.....	16.7	83.3
20/240	14/168	4.00 D	18	14.0	86.0
20/260	14/182	.....	.....	11.7	88.3
20/280	14/196	.....	.....	9.7	90.3
20/300	14/210	.....	.....	8.2	91.8
20/320	14/224	6.00 D	19	6.8	93.2
20/340	14/238	.....	.....	5.7	94.3
20/360	14/252	.....	.....	4.8	95.2
20/380	14/266	.....	.....	4.0	96.0
20/400	14/280	.....	.....	3.3	96.7
20/450	14/315	8.00 D	20	2.1	97.9
20/500	14/350	.....	.....	1.4	98.6
20/600	14/420	.....	.....	0.6	99.4
20/700	14/490	.....	.....	0.3	99.7
20/800	14/560	.....	.....	0.1	99.9

TABLE 2*

Loss in Muscle Function

No loss =	100%	Motor Field Efficiency
1/20 =	98%	Motor Field Efficiency
2/20 =	95%	Motor Field Efficiency
3/20 =	92%	Motor Field Efficiency
4/20 =	89%	Motor Field Efficiency
5/20 =	87%	Motor Field Efficiency
6/20 =	84%	Motor Field Efficiency
7/20 =	81%	Motor Field Efficiency
8/20 =	77%	Motor Field Efficiency
9/20 =	74%	Motor Field Efficiency
10/20 =	71%	Motor Field Efficiency
11/20 =	67%	Motor Field Efficiency
12/20 =	63%	Motor Field Efficiency
13/20 =	59%	Motor Field Efficiency
14/20 =	55%	Motor Field Efficiency
15/20 =	50%	Motor Field Efficiency
16/20 =	45%	Motor Field Efficiency
17/20 =	39%	Motor Field Efficiency
18/20 =	32%	Motor Field Efficiency
19/20 =	22%	Motor Field Efficiency
20/20 =	0%	Motor Field Efficiency

*Reprinted from Report of Committee on Compensation for Eye Injuries, A. M. A., Nelson M. Black, M.D., chairman; report dated May 26, 1925.

703 Huntington Bldg.

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., President.....Miami
GILBERT S. OSINCUP, M.D., President-Elect.....Orlando
LUTHER W. HOLLOWAY, M.D., 1st Vice-Pres.....Jacksonville
FREDERICK K. HERPEL, M.D., 2nd Vice-Pres., *W. Palm Bch.*
WALTER C. PAYNE, M.D., 3rd Vice-Pres.....Pensacola
SHALER RICHARDSON, M.D., Sec'y-Treas.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., Chm., "C," '44.....Jacksonville
J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43.....*W. Palm Beach*
WALTER C. PAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D. (Ex-Officio).....Jacksonville
SHALER RICHARDSON, M.D. (Ex-Officio).....Jacksonville
STEWART G. THOMPSON, D.P.H. (Advisory).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., Chairman, "C," '43.....*St. Augustine*
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
HOMER L. PEARSON, M.D., "F," '44.....Miami
JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAICK, M.D., Chm., "C," '43.....Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MCCONNELL, M.D., "D," '42.....St. Petersburg
BRICEY M. RHODES, M.D., "A," '42.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami
WALTER C. JONES, M.D. (Ex-Officio).....Miami
SHALER RICHARDSON, M.D., (Ex-Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., Chm., "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
J. N. McLANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Orlando

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., Chm., "C," '42.....Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., Chairman, "F," '42.....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm., "C," '42.....Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43.....*W. Palm Beach*
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chairman, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R. W. S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., Chm., "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '43.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm., "C," '42.....Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm., "F," '44.....Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '43.....Gainesville
GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., Chairman, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. MCEWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYSENBURG, M.D., "C," '43.....Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., Chm., "E," '44.....Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44.....Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., Chm., "F," '42.....*W. Palm Bch.*
LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARDLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., Chm., "F," '44.....Coral Gables
THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
EUGENE G. PEEK, M.D., "B," '42.....Ocala
COUNCILL C. RUDOLPH, M.D., "D," '42.....St. Petersburg
WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., Chm., "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

Twelfth—W. DUNCAN OWENS, M.D., Chm., '43 Miami Bch.
First—WILLIAM C. ROBERTS, M.D., '42.....Panama City
Second—C. D. WHITAKER, M.D., '43.....Marianna
Third—J. M. PRICE, M.D., '43.....Live Oak
Fourth—ALVA T. CORB, M.D., '42.....Gainesville
Fifth—LUCIEN Y. DYRENFORTH, M.D., '43.....Jacksonville
Sixth—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
Seventh—JOHN R. BOLING, M.D., '43.....Tampa
Eighth—HOWARD V. WEEMS, M.D., '42.....Sebring
Ninth—CARL D. HOFFMANN, M.D., '42.....Orlando
Tenth—E. B. HARDEE, M.D., '43.....Vero Beach
Eleventh—ROBERT L. ELLISTON, M.D., '42.....Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., Chairman, "A," '43.....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFRO DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. PAULLIN, M.D., (A.M.A. Ex-Officio).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate.....West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., Chairman, 1919.....Jacksonville
W. HENRY SPIERS, M.D., Secretary, 1938.....Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902.....Pensacola
HENRY E. PALMER, M.D., 1909.....Tallahassee
ROBERT H. MCGINNIS, M.D., 1915.....Jacksonville
FREDERICK J. WALTER, M.D., 1918.....San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....Tampa
H. MARSHALL TAYLOR, M.D., 1923.....Jacksonville
JOHN C. VINSON, M.D., 1924.....Tampa
JOHN S. MCEWAN, M.D., 1925.....Orlando
H. MASON SMITH, M.D., 1926.....Tampa
JOHN A. SIMMONS, M.D., 1927.....Arcadia
FREDERICK J. WAAS, M.D., 1928.....Jacksonville
HENRY C. DOZIER, M.D., 1929.....Ocala
JULIUS C. DAVIS, M.D., 1930.....Quincy
GERRY R. HOLDEN, M.D., 1932.....Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....Tampa
HOMER L. PEARSON, M.D., 1934.....Miami
HERBERT L. BRYANS, M.D., 1935.....Pensacola
ORION O. FEASTER, M.D., 1936.....St. Petersburg
EDWARD JELKS, M.D., 1937.....Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....Century

The Journal of The Florida Medical Association

Owned and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D. *Orlando*
FRANK C. METZGER, M.D. *Tampa*
HOMER L. PEARSON, M.D. *Miami*
J. H. POUND, M.D. *Tallahassee*
W. McL. SHAW, M.D. *Jacksonville*

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., Chairman. *Miami*
SHALER RICHARDSON, M.D. *Jacksonville*
HERMAN WATSON, M.D. *Lakeland*

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman. *Jacksonville*
THEODORE F. HAHN, M.D. *Deland*
COUNCIL C. RUDOLPH, M.D. *St. Petersburg*

DIETS

In the daily work of every physician the question of what the patient should or should not eat in the presence of this disease or that is receiving more and more notice. This increasing attention to dietary regimen is understandable in the light of the growing knowledge of the action and relative value of the various foods and their mineral and vitamin content. Particularly has the recent clarification of the vitamin problem brought about a radical change in many ideas and procedures. Nor, one hopes, has the last word been said on this important subject. Granting the importance of foods, why does the physician encounter so many objections from the patient when a dietary regimen becomes necessary?

The general public, as is well known, is usually twenty years behind science in its knowledge. It clings with tenacity to the opinions handed down and the regimens prescribed by parents and grandparents. "The good old days" and "Mother's home cooking" are familiar phrases expressing habit ideas hard to overcome. The veil of time lends them a sentimental value beyond the power of the physician to combat.

Likewise, there is an all too common narrowness of vision that leads many persons to judge all cases by the exception. Thus a barrier is raised which science with its exact methods, controlled experiments and thousands of cases for study puts forth great effort to pierce. The fact that Old Man Smith drank, smoked, chewed and ate anything he wanted, yet lived to be 85 years of age definitely helps to shape the ideas of a whole neighborhood. Consideration of the other

Smiths, whose premature deaths resulted directly from such habits, is ignored as are such circumstances as physical surroundings, a placid disposition and a particularly stalwart constitution that may have so offset the harm of Old Man Smith's mode of living as to enable him to attain this ripe old age.

Certain fixed ideas of the individual patient may sometimes be changed somewhat, but the physician finds them difficult to dislodge. The accomplishments of science in replacing outmoded methods and remedies, correcting former beliefs regarding reactions to the various foods and supplying newer, better substances for the old leave many a patient unimpressed. A lucid explanation by the physician will, however, overcome some of the objections to the changing order.

Among the obstacles which the physician can largely overcome are objections on the ground of dietary deficiency. These objections, often strenuous, arise as a rule from the patient's misunderstanding of the true factors involved, which in the majority of cases are psychic in origin. Thus when a patient declares, "You are starving me with this diet," he actually means he is unwilling to take the time and trouble to break the old habits of eating what he likes. The diet is objectionable not because the physician "starves" him, but because he "starves" himself.

When the physician excludes milk, eggs and coffee from the diet, the patient usually demands, "What do you expect me to eat for breakfast?" There is no scientific evidence that a person should not eat any other food for the first meal of the day, nor that these three articles of food are the best, or even necessary. In the mind of the laity confusion in the application of the words necessary and customary is abetted by the dread of change.

The patient's fear of dietary deficiency is too frequently shared by the physician who has not prescribed the diet in question. A diet that includes three or four vegetables, one or more meats, two fruits, a grain and a fat is certainly not deficient in protein, carbohydrates, fat, minerals or vitamins. Few diets are that strict.

The presence in milk of calcium in highly assimilable form has been stressed often enough and widely enough to give rise to the idea that milk is the only food that contains this necessary mineral. The humble spinach, however, and the not so humble cauliflower contain a goodly amount

of calcium. One might have to eat large quantities of these vegetables to insure the ingestion of as much calcium as a limited quantity of milk would supply, but hypocalcemia could thus be avoided.

Even a vegetarian must meet his need for proteins. He does, particularly if he eats bananas. The question of deficiency is usually reduced to the fact that the patient who complains of it eats an insufficient amount of the foods allowed and not that the necessary ingredients are lacking.

The physician who has patience enough and takes time enough usually discovers that the patient objects, not to deficiency as he believes, but to monotony. Most people, particularly Americans, detest monotony. By explaining away the idea of deficiency in the light of the truths mentioned, the physician may persuade the patient to change his attitude and accept the necessary monotony as he would the required bed rest in case of a broken leg. Tactful explanation overcomes a great many of the objections to a dietary regimen.



ALLERGY

The disorders commonly recognized as probable manifestations of the phenomenon of allergy present a problem in which every physician, be he general practitioner or specialist, is vitally interested. When we consider the more common allergic diseases, such as asthma, hay fever, urticaria and angioneurotic edema, and also the various skin disorders, gastrointestinal disturbances, migraine, vasomotor rhinitis and other conditions that may be related to allergy, it will readily be seen that no physician is excepted. Although the diagnosis and treatment of the allergic diseases have become a highly specialized branch of medicine, the internist, pediatrician, rhinologist, ophthalmologist and surgeon, together with the general practitioner, all require a working knowledge of this specialty. While asthma is not a neurosis of itself, in many patients paroxysms are provoked by some neural imbalance, and the neurologist may be called into consultation.

Although an allergic disorder is not directly inherited, it is generally believed that there is an "hereditary tendency." It is estimated that in the United States there are in excess of two million asthmatics and a like number of victims of pollinosis. With the normal increase of our

population, the enormity of the problem cannot be overestimated.

It should always be borne in mind by those who have assumed the responsibility of providing relief for human suffering, that while in some cases the most expert investigators are baffled, in others relief is obtained with what might be termed ridiculous ease. When we observe a child, suffering more or less constantly from bronchial asthma, who is almost immediately relieved by some simple expedient such as the removal of an offending item from the dietary, or the victim of hay fever relieved by desensitization to an offending pollen, we are convinced that though many of these problems are hard to solve, nothing should deter us from providing an exhaustive study whenever there is justification for the belief that allergy may be the underlying factor. While anything less than a complete study of any medical problem should be discouraged, facilities provided by many reputable pharmaceutical firms make it practical even for the physician located in a small town or rural community to approach a suspected allergic problem. Frequently he will be gratified with the information acquired and the results obtained.

The all important part that education of the public plays in almost any medical problem should not be overlooked. During the last decade many noteworthy articles have appeared in lay magazines, which have accomplished much to make our people mindful of allergy. All efforts properly directed along this line will help in the solution of what constitutes a major public health problem.



MEETING OF THE STATEWIDE PUBLIC HEALTH COMMITTEE

The Statewide Public Health Committee held its annual meeting in Orlando beginning Thursday evening, January 15, and ending with a luncheon meeting Saturday, the 17th. No more concrete evidence could be presented to the medical profession indicating the interest of the public both in public health matters and in the place which the private physician holds in the general health of the State than was presented at this meeting. The round table discussions which were held Friday and Saturday afforded ample opportunity for the layman in attendance to discuss freely with public health officials all matters

pertaining to the general health of the individual, and to become familiar with the functions of the various public health agencies. In many instances these discussions were most enlightening. The exchange of ideas enabled the practicing physician and the public health official to learn the viewpoint of the thinking layman. It also gave the official health worker an opportunity to do effective educational work with the leaders in civic activities in the State of Florida, which will undoubtedly lead to the dissemination of knowledge along health lines and a better understanding of the problems of the practicing physician and the public health official.

Two hundred persons were expected at the meeting, and over seven hundred registered. There were approximately five hundred at the dinner, and more than two hundred applied who could not be accommodated. The guests of honor were the Surgeon General of the Public Health Service, Dr. Thomas Parran, and Mrs. Spessard Holland, wife of the Governor of Florida. Present were numerous officers of the U. S. Public Health Service, a large attendance from the State Board of Health, and a few representatives from the Florida Medical Association. Dr. Parran made the principal address at the dinner Friday at 7 p. m. His address was enthusiastically received, both by the profession and the lay public.

The most important announcement made affecting the general practitioner and the State public health officials, was by the chairman of a special committee, who reported that the codification of all health laws on the statute books of the State of Florida is proceeding satisfactorily. It is the ultimate purpose of this committee, which is composed of practicing physicians, a prominent attorney appointed by the Governor, and lay members, to make a careful study of these laws, effect a revision, and modernize all acts pertaining to health. One of the functions of this committee is to revise the law with reference to the method of appointing the executive officials and members of the State Board of Health. It is also anticipated that all agencies undertaking any phase of health work, either voluntary or public health, will be placed under the direct supervision of the State Board of Health, or will have to make application and submit an annual report to the State Board of Health. This Committee has now been operating a year. Its members have been re-appointed and it is to continue its studies for another year.

Among the doctors present were the follow-

ing members of the State Association: Dr. Walter C. Jones, President of the Association; Dr. Gilbert Osincup of Orlando, President-elect; Dr. Herbert L. Bryans, acting president of the State Board of Health; Dr. W. H. Pickett, State Health Officer; Dr. J. N. Patterson, Assistant State Health Officer; Dr. J. Maxey Dell, Jr., of Gainesville; Dr. J. Sam Turberville, past President of Florida Medical Association; Dr. J. R. McEachern, City Health Officer, Tampa, and Dr. T. Z. Cason of Jacksonville, a member of the executive committee of the Statewide Public Health Committee.

The next meeting will be held in Jacksonville in 1943.



RECOMMENDATIONS TO ALL PHYSICIANS WITH REFERENCE TO THE NATIONAL EMERGENCY

1. MEDICAL STUDENTS

A. All students holding letters of acceptance from the dean for admission to medical colleges and freshmen and sophomores of good academic standing in medical colleges should present letters or have letters presented for them by their deans to their local boards of the Selective Service System. This step is necessary in order to be considered for deferment in Class II-A as a medical student. If local boards classify such students in Class I-A, they should immediately notify their deans and if necessary exercise their rights of appeal to the Board of Appeals. If, after exhausting such rights of appeal, further consideration is necessary, request for further appeal may be made to the State Director and if necessary to the National Director of the Selective Service System. These officers have the power to take appeals to the President.

B. Those junior and senior students who are disqualified physically for commissions are to be recommended for deferment to local boards by their deans. These students should enroll with the Procurement and Assignment Service for other assignment.

C. All junior and senior students in good standing in medical schools, who have not done so, should apply immediately for commission in the Army or the Navy. This commission is in the grade of Second Lieutenant, Medical Administrative Corps of the Army of the United States, or Ensign H. V. (P) of the United States Navy Re-

From Procurement and Assignment Service for Physicians, Dentists, and Veterinarians.

serve, the choice as to Army or Navy being entirely voluntary. Applications for commission in the Army should be made to the Corps Area Surgeon of the Corps Area in which the applicant resides and applications for commission in the Navy should be made to the Commandant of the Naval District in which the applicant resides. Medical R.O.T.C. students should continue as before with a view of obtaining commissions as First Lieutenants, Medical Corps, upon graduation. Students who hold commissions, while the commissions are in force, come under the jurisdiction of the Army and Navy authorities and are not subject to induction under the Selective Service Act. The Army and Navy authorities will defer calling these officers to active duty until they have completed their medical education and at least 12 months of internship.

2. RECENT GRADUATES

Upon successful completion of the medical college course, every individual holding commission as a Second Lieutenant, Medical Administrative Corps, Army of the United States, should make immediate application to the Adjutant General, United States Army, Washington, D. C., for appointment as First Lieutenant, Medical Corps, Army of the United States. Every individual holding commission as Ensign H.V. (P), U. S. Navy Reserve, should make immediate application to the Commandant of his Naval District for commission as Lieutenant (J.G.) Medical Corps Reserve, U. S. Navy. If appointment is desired in the grade of Lieutenant, (J.G.) in the regular Medical Corps of the U. S. Navy, application should be made to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

3. TWELVE MONTHS INTERNS

All interns should apply for a commission as First Lieutenant, Medical Corps, Army of the United States, or as Lieutenant (J.G.), United States Navy or Navy Reserve. Upon completion of 12 months' internship, except in rare instances where the necessity of continuation as a member of the staff or as a resident can be defended by the institution, all who are physically fit may be required to enter military service. Those commissioned may then expect to enter military service in their professional capacity as medical officers; those who failed to apply for commission are liable for military service under the Selective Service Acts.

4. HOSPITAL STAFF MEMBERS

Interns with more than 12 months of internship, assistant residents, fellows, residents, junior staff members, and staff members under the age of 45, fall within the provisions of the Selective Service Acts which provide that all men between the ages of 20 and 45 are liable for military service. All such men holding Army commissions are subject to call at any time and only temporary deferment is possible, upon approval of the application made by the institution to the Adjutant General of the United States Army certifying that the individual is temporarily indispensable. All such men holding Naval Reserve commissions are subject to call at any time at the discretion of the Secretary of the Navy. Temporary deferments may be granted only upon approval of applications made to the Surgeon General of the Navy.

All men in this category who do not hold commissions should enroll with the Procurement and Assignment Service. The Procurement and Assignment Service under the Executive Order of the President is charged with the proper distribution of medical personnel for military, governmental, industrial, and civil agencies of the entire country. All those so enrolled whose services have not been established as essential in their present capacities will be certified as available to the Army, Navy, governmental, industrial, or civil agencies requiring their services for the duration of the war.

5. ALL PHYSICIANS UNDER FORTY-FIVE

All male physicians in this category are liable for military service and those who do not hold commissions are subject to induction under the Selective Service Acts. In order that their service may be utilized in a professional capacity as medical officers, they should be made available for service when needed. Wherever possible, their present positions in civil life should be filled or provisions made for filling their positions, by those who are (a) over 45, (b) physicians under 45 who are physically disqualified for military service, (c) women physicians, and (d) instructors and those engaged in research who do not possess an M.D. degree whose utilization would make available a physician for military service.

Every physician in this age group will be asked to enroll at an early date with the Procurement and Assignment Service. He will be certified for a position commensurate with his professional training and experience as requisitions

are placed with the Procurement and Assignment Service by military, governmental, industrial or civil agencies requiring the assistance of those who must be dislocated for the duration of the national emergency.

6. ALL PHYSICIANS OVER FORTY-FIVE

All physicians over 45 will be asked to enroll with the Procurement and Assignment Service at an early date. Those who are essential in their present capacities will be retained and those who are available for assignment to military, governmental, industrial or civil agencies may be asked by the Procurement and Assignment Service to serve those Agencies.

The maximal age for original appointment in the Army of the United States is 55. The maximal age for original appointment in the Naval Reserve is 50 years of age.

All inquiries concerning The Procurement and Assignment Service should be sent to The Executive Officer, 5654 Social Security Building, 4th and Independence Avenues, SW, Washington, D. C., and not to individual members of the Directing Board or of committees thereof.

GRADUATE SHORT COURSE

The dates set for the Graduate Short Course this year are June 22 to 27, 1942, inclusive. The lectures will again be given at the George Washington Hotel in Jacksonville. A number of new faces will be seen on the faculty this year, notably the lecturers on Surgery, Pediatrics, and Medicine. There will be no lectures on Military Medicine. The Venereal Disease instruction will run concurrently with that on Medicine and Surgery, and clinics will be held at the Duval County Hospital, in the evenings.

The time heretofore devoted to Venereal Diseases and Military Medicine, or similar subjects, will be utilized for additional lectures on Medicine, Pediatrics, and Obstetrics.

The George Washington Hotel has offered the same rate as for the previous two years; other nice places in the City have offered rates of from \$1.00 to \$1.50 a day. A list of these places will be furnished on request by the Florida Medical Association, Box 1018, Jacksonville, Florida.

FLORIDA EAST COAST MEDICAL ASSOCIATION

The Fourteenth Annual Meeting of the Florida East Coast Medical Association was held at the Osceola Hotel, Daytona Beach, December 5 and 6, 1941. The attendance was excellent, 58 members and 19 ladies being present.

The first session occupied the afternoon of Friday, December 5, and was well attended. The meeting was opened by Rev. Paul M. Edris and President Joseph S. Stewart steered it through to a conclusion within striking distance of the planned closing hour. The following papers were read:

"Sulfonamide Group in Surgery," Frederick J. Waas, M.D., Jacksonville and Edward Canipelli, M.D., Jacksonville.

"The Medical Uses of Sulfonamide Drugs," Karl B. Hanson, M.D., Jacksonville.

"A Review of the Present Status of Sulfonamide in Open Wounds," Lloyd J. Netto, M.D., West Palm Beach.

"The Dade County Blood and Plasma Bank," Donald W. Smith, M.D., Miami. Discussion by: Scheffel H. Wright, M.D., Miami; Lt. R. F. Meyers, Opa Locka Naval Air Station; J. Ralston Wells, M.D., Daytona Beach.

"Contact Lens," Charles Boyd, M.D., Jacksonville. Discussion by: Shaler Richardson, M.D., Jacksonville; Charles Grace, M.D., St. Augustine.

Following the business session a punch bowl hour preceded a banquet and dancing in the hotel. Dr. Edward Jelks presented the Roy Holmes, M.D., memorial address "Our Heritage" in his usual masterly fashion. The presentation was appreciated. The other speakers, the living past presidents of the Association, were also excellent. These addresses were confined to a bow apiece and thus acknowledged the old adage that brevity is the soul of wit.

The morning of the second session, Saturday, December 6, got off to a good start. The following papers were read:

"The Right Upper Urinary Tract in Right-Sided Abdominal Pain," Robert B. McIver, M.D., Jacksonville.

"The Uses of Eucupin for the Prevention of Post-operative Pain in Proctological Surgery," Don C. Robertson, M.D., Orlando. Discussion by: Rocher Chappell, M.D., Orlando and Harrison A. Walker, M.D., Miami Beach.

"An Unusual Case of Skin Pigmentation," T. C. Kenaston, M.D., Cocoa. Discussion by: T. E. Buckman, M.D., Jacksonville.

"Pneumonitis," Ernest B. Milam, M.D., Jacksonville. Discussion by: E. C. Swift, M.D., Jacksonville and W. W. Kirk, M.D., Jacksonville.

The meeting was concluded by the annual business session with Dr. Joseph S. Stewart, presiding. Minutes of the last meeting were accepted and the treasurer's report being zero, zero, an auditor was not thought necessary. Melbourne was selected as the next meeting place. The following officers were elected: Dr. T. C.

The March JOURNAL
will contain the Program of
The Next Annual Convention
Palm Beach Apr. 13-15, 1942

Kenaston, Cocoa, president; Dr. I. M. Hay, Melbourne, secretary; Dr. Lloyd J. Netto, West Palm Beach, 1st vice-president. There being no further business, the meeting adjourned.

The grand drawing was won by Dr. Don C. Robertson, Orlando and Dr. J. Ralston Wells, Daytona Beach.

Presidents and secretaries since 1927 follow:

YEAR	PRESIDENT	SECRETARY
1927	W. E. Van Landingham	Roy J. Holmes
1928	W. E. Van Landingham	Roy J. Holmes
1929	John E. Hall	.....
1930	Roy J. Holmes	I. M. Hay
1931	No meeting	.....
1932	J. Ralston Wells	E. C. Swift
1933	Edward Jelks	Homer L. Pearson
1934	Leigh F. Robinson	Spencer A. Folsom
1935	Harrison A. Walker	Reddin Britt
1936	Edwin C. Swift	E. B. Hardee
1937	E. B. Hardee	Elbert McLaury
1938	Walter C. Jones	T. C. Kenaston
1939	Frederick J. Waas	Arthur J. Logie
1940	I. M. Hay	Joseph S. Stewart
1941	Joseph S. Stewart	J. Ralston Wells

MEDICAL LICENSES GRANTED

Dr. W. M. Rowlett, Secretary of the State Board of Medical Examiners, reports that of the 62 applicants who took the State Board Examination held in Jacksonville on November 24 and 25, 1941, 55 received passing grades and have been licensed to practice medicine and surgery in Florida. The names of the successful applicants are as follows:

Artega, Oliver, Camp Blanding (Emory, 1927)
 Baker, Lynne E., Jacksonville (U. of Cincinnati, 1934)
 Berry, Courtland D., Durham, N. Car. (Duke, 1938)
 Bowser, Frank E., Key West (U. of Pittsburgh, 1923)
 Cafaro, S. Raymond, Camp Blanding (Loyola, 1933)
 Corey, Wilbur L., Miami (Geo. Washington U., 1927)
 Cunningham, James J., Miami (Queens U., 1940)
 Dellinger, Raiden W., Jacksonville (Emory, 1938)
 Dry, Frank M., Chicago (Loyola, 1918)
 Eason, Jack B., Tavares (Jefferson, 1930)
 Forastiere, Roger J., New York (Johns Hopkins, 1935)
 Ghiselin, Alexander D., Jr., New York (Columbia, 1929)
 Godlin, David R., Miami (N. Y. Homeo., 1926)
 Grace, Angus D., St. Petersburg (Tulane, 1941)
 Graham, Henry H., Gainesville (Cornell, 1941)
 Groom, Joseph J., Miami (Ohio, 1941)
 Hartman, Maxwell M., Port Washington, N. Y. (Long Island Coll., 1928)
 Hilsman, Joe H., Charlottesville, Va. (Vanderbilt, 1941)
 Hoover, Russell D., Jacksonville (Temple, 1941)
 Jacobson, Leonard H., Winter Park (Washington U., 1939)
 Kaminski, Theodore, Miami (U. of Louisville, 1940)
 Kasboum, William J., Orlando (U. of Buffalo, 1939)
 Kornblum, Stanley A., Monticello, N. Y. (Long Island Coll., 1940)
 Kuhn, Hugh A., Hammond, Ind. (U. of Cincinnati, 1921)
 Lanier, Joe E., Jacksonville (U. of Georgia, 1941)
 Lawson, George W., Miami Beach (Georgetown U., 1936)
 Lockwood, James H., Jacksonville (Jefferson, 1941)
 Loeb, Martin J., Bronx, New York (N. Y. Univ., 1909)
 London, Seymour B., Miami Beach (Harvard, 1940)

Lumpkin, Lloyd U., Elkins, W. Va. (U. of Maryland, 1926)
 Mangels, Martin, Jr., Jacksonville (Harvard, 1938)
 Myers, Lucien E., Cherry Valley, N. Y. (Tulane, 1932)
 Noble, Jerome, Brooklyn, N. Y. (Long Island Coll., 1940)
 Norris, Alfred W., Port St. Joe (Med. Coll. of Va., 1937)
 Parker, Thomas L., St. Petersburg (Emory, 1916)
 Redman, William M., Safety Harbor (Tufts, 1933)
 Rosenquist, R. W., Orlando (Coll. Med. Evangelists, 1941)
 Rosnick, Manning J., Jacksonville (Hahnemann, 1941)
 Ross, Martin, New York (Columbia, 1918)
 Rozier, John S., Laurel Hill (Tulane, 1940)
 Rudin, Harry N., Welfare Island, N. Y. (U. of Minn., 1939)
 Seabaugh, Dayton R., Jacksonville (Washington U., 1933)
 Sheldon, James T., Rochester, Minn. (U. of Minn., 1938)
 Silverberg, Morris N., Brooklyn, N. Y. (Western Reserve, 1926)
 Slaughter, T. K., Jr., Wildwood (Med. Coll. S. Car., 1941)
 Smith, William P., Miami (U. of Louisville, 1941)
 Steiner, Norman H., Tampa (U. of Wisconsin, 1940)
 Stoup, Francis H., Barnesville, O. (Ohio, 1926)
 Sumner, Wilbur C., Jacksonville (U. of Georgia, 1941)
 Tarr, Harry, Brooklyn, N. Y. (Laval U., Canada, 1930)
 Tugwell, Frank E., Jacksonville (Tulane, 1941)
 Ulm, A. Hardy, Atlanta (Harvard, 1939)
 Usdin, Daniel R., Jacksonville (Tulane, 1941)
 Waltermann, David, Miami Beach (Georgetown U., 1939)
 Young, Joseph E., Greensboro, N. Car. (U. of Va., 1932)

PRE-CONVENTION MEETING

The Pre-Convention Meeting was held in Jacksonville, January 4, at the Seminole Hotel. The total registration was 49.

During the forenoon, meetings of the following standing committees were held: Executive, Scientific Work, Legislation and Public Policy, Medical Economics, Venereal Disease Control, Medical Postgraduate Course, Publication, Cancer Control and Medical Preparedness. The officers and board directors of the Florida Association of Industrial Surgeons also held a meeting during the forenoon. Luncheon was served in the Silver Room, following which the first general session convened.

Dr. Walter C. Jones, president, called the meeting to order and reviewed the suggested changes in the medical and councilor districts. Dr. W. Duncan Owens, chairman of the Council, discussed these changes, which will, if adopted, reduce the number of medical districts from six to four, and the councilor districts from twelve to eight. Other changes considered were: the inclusion of the two last living immediate past presidents as official members of the Executive Committee; the appointment of a councilor at large who would become automatically the chair-

man of the Council; the designation of one member from each medical district to serve on all standing committees; and the addition of one member at large to all standing committees. These proposed changes had been presented and discussed at each of the six medical district meetings last fall and published in the November and December Journals; however, more details were given at this meeting.

The gavel was turned over to Dr. W. Duncan Owens, chairman of the Council, and the next order of business was the reading of annual reports by councilors. Councilors' reports read were: first district, Dr. W. C. Roberts; second, Dr. C. D. Whitaker; third, Dr. J. M. Price; sixth, Dr. Maximilian Stern; seventh, Dr. John R. Boling; eighth, Dr. H. V. Weems; ninth, Dr. C. D. Hoffmann; tenth, Dr. E. B. Hardee; and eleventh, Dr. R. L. Elliston. The councilors' reports as read were turned in to Dr. Richardson for publication in the Journal.

The gavel was returned to Dr. Jones who called for the reading of preliminary reports by chairmen of regular committees. The following committee chairmen made brief but interesting progress reports: Dr. Louie Limbaugh, Executive Committee; Dr. Herbert E. White, Scientific Work; Dr. J. Ralston Wells, Public Relations; Dr. T. Z. Cason, Medical Postgraduate Course; Dr. Alfred G. Levin, Cancer Control; Dr. E. T. Sellers, Venereal Disease Control; and Dr. Edward Jelks, Medical Preparedness.

Dr. Gilbert S. Osincup, president-elect, was recognized. He briefly discussed his efforts in arranging for new committee appointments and outlined the work to be undertaken during his presidential year beginning in April.

REGISTRATION

OFFICERS

Walter C. Jones, *President* Miami
Gilbert S. Osincup, *President-Elect* Orlando
L. W. Holloway, *First Vice-President* Jacksonville
F. K. Herpel, *Second Vice-President* West Palm Beach
Shaler Richardson, *Sec'y-Treas.-Editor* Jacksonville
Stewart Thompson, *Managing Director* Jacksonville

MEMBERS

Daytona Beach: J. Ralston Wells. *Gainesville:* A. T. Cobb, J. M. Dell, Jr., John E. Maines, Jr., W. C. Thomas, George C. Tillman. *Green Cove Springs:* W. L. Ashton. *Jacksonville:* T. Z. Cason, L. Y. Dyrenforth, Banks H. Goodale, William G. Harris, W. Tracy Haverfield, Gerry R. Holden, Edward Jelks, Louie Limbaugh, J. G. Lyerly, Robert B. McIver, Kenneth A. Morris, S. R. Norris, G. F. Oetjen, J. N. Patterson, Harry A. Peyton, Ferdinand Richards, E. T. Sellers, W. McL. Shaw, Frank G. Slaughter, E. C. Swift.
Lake City: T. H. Bates, R. B. Harkness. *Lakeland:* T. H. Roberts. *Miami:* Alfred G. Levin. *Miami Beach:*

W. Duncan Owens. *Orlando:* J. R. Chappell, C. J. Collins. *Plant City:* T. C. Maguire. *St. Augustine:* Herbert E. White. *St. Petersburg:* Alvin L. Mills. *Tallahassee:* J. H. Pound. *Tampa:* A. M. Bidwell, George L. Cook. *Vero Beach:* E. B. Hardee. *West Palm Beach:* W. W. George.

VISITING DOCTORS

Jacksonville: R. C. Hood.



COUNCILORS' REPORTS

FIRST DISTRICT—

WILLIAM CARMEL ROBERTS, M.D. *Panama City*
Bay, Escambia, Holmes, Okaloosa, Santa Rosa, Walton, Washington.

After reminiscing over the events, contacts and interviews that took place from time to time during the past year, it is with much pleasure that I report that in District "A" everything is satisfactory.

The county societies and the members individually have cooperated in every activity in a most commendable manner. The District meeting in Tallahassee was most successful in every phase. The spirit and the enthusiasm of the members with reference to national defense, organized medicine and social fraternization is definitely on a very high plain.

As Senior Councilor of this district I represented the Florida Medical Association at the meeting of the State Chamber of Commerce held at Panama City by request and proxy from the President of the Association, Dr. Walter C. Jones.

It is with much confidence that I assure the Florida Medical Association that District "A" may be counted upon to carry its part in any of the Association's endeavors. We will always strive to achieve and maintain the honor of being the first district for more reasons than just designation.

The chairman of the council and the district councilors are more than grateful for the efforts and interest shown by the county societies and individual members during a most successful year.

SECOND DISTRICT—

COURTLAND D. WHITAKER, M.D. *Marianna*
Calhoun, Franklin, Gadsden, Gulf, Jackson, Jefferson, Leon, Liberty, Wakulla.

Our district meeting at Tallahassee was well attended and was a great success. The Gulf Coast Clinical Society met at Pensacola in 1941 and the meeting was outstanding and well attended. Many members of this district are included in its membership.

A good many members of the profession in this district have been called into Service. Quincy suffered most so far, giving up 50 per cent of its doctors to the Army and Navy. Those doctors left at home are working in harmony with national defense.

On January 1, 1942, the doors of the new Jackson Hospital opened at Marianna. This is a modern and well equipped hospital which the entire membership of Jackson County Society is proud of.

The year as a whole has been marked with success, good will and harmony all over this district.

FOURTH DISTRICT—

A. T. COBB, M.D. *Gainesville*
Alachua, Bradford, Citrus, Gilchrist, Hernando, Levy, Marion, Pasco, Sumter and Union Counties.

I am happy to report that the condition of the Fourth District is an excellent one, and because of the fine fellowship and cooperation that exist between the component societies, the duties of your councilor have been very light. I feel free to state that we all are in full accord with the objectives of the State and National Associations.

The Alachua County Society which includes Bradford, Gilchrist, and Union Counties has a member-

ship of 31 with 84 per cent of dues paid. Marion County which includes Levy has a membership of 27 with 81 per cent paid, and Pasco-Hernando-Citrus a membership of 15, 100 per cent paid. All component societies have been active and their programs above the average.

Our fifth annual district meeting, held in Gainesville, October 3, 1941, was well attended, and a success in every respect.

Some discussion occurred relative to examinations being made for the National Youth Administration's program, but this was quickly cleared up and the work carried out satisfactorily and promptly.

On behalf of members of my district, I wish to extend to all officials of the State Association our sincere thanks for their valued assistance and for the splendid work each and every one has done. I stand ready to see that any message this meeting wishes is delivered to them promptly.

Quite a number of our members have been called into the armed forces during the past year. I am certain that all of those left behind stand willing and ready to do their share, if and when necessary, toward the preserving of our way of life and toward the defense of our country.

FIFTH DISTRICT—

LUCIEN DYRENFORTH, M.D. *Jacksonville*
Clay, Duval, Nassau, St. Johns.

Since the appointment of this Councilor following the last meeting of the Association, there have been only the District meetings and their activities upon which to report.

Your Councilor was present and presided over a part of the District meeting held at St. Augustine, Saturday, October 4, 1941. Attendance was also observed at the District meetings held at Tallahassee, Hollywood, Bartow and Orlando. It was not possible to attend the one at Gainesville.

SIXTH DISTRICT—

MAXIMILIAN STERN, M.D. *Daytona Beach*
Flagler, Putnam, Volusia.

District 6 comprises Societies in Volusia and Putnam Counties. In Flagler County the Volusia County Medical Society acts in a supervisory capacity until a society can be established.

One noteworthy forward movement in my district consists in the establishment of a Health Unit in Volusia County. Because of war conditions and uncertainties with regard to finances, the present status of this project is one of suspended animation though ample assistance exists for its final consummation.

The District meeting at St. Augustine was a complete success and there were many features of unusual interest.

The Fourteenth Annual Meeting of the Florida East Coast Medical Association was held at the Osceola Hotel, Daytona Beach, Florida, December 5 and 6, 1941; it was well attended, there being present a large number of visiting physicians from various parts of the State.

One other important function of our society has been the organization of the Medical Units of our Home Defense Program, under the leadership of Dr. Hugh West of DeLand. There will be an ample number of medical, surgical, urological and nose and throat Units to cover the needs of the entire District. There will also be Units manned by the colored physicians and nurses.

In this District to date the Councilor has not been called upon to function in the capacity of peacemaker or censor, there having been no disagreement or breaches in our ethical relations. In this connection it gives me pleasure to state that the general condition of the profession in all of the counties of this District is in accordance with its highest traditions.

SEVENTH DISTRICT—

JOHN R. BOLING, M.D. *Tampa*
Hillsborough, Manatee, Pinellas, Sarasota.

All of the Societies are cooperating whole-heartedly in the National Defense Program and their schedules are being carried out in a satisfactory manner.

The Hillsborough County Society at a recent meeting changed its By-Laws to allow its members to consult with contract practitioners. The Amendment, inserted at the end of Section 6, Chapter 1, of the By-Laws reads as follows: "It shall be considered ethical for a member of the Hillsborough County Medical Society to consult with, or furnish a written report to, so-called contract practitioners, so long as the patient involved is a private patient of the contract doctor and the consultation takes place outside of a contract hospital. It is to be emphasized that under no circumstances shall any member of the Medical Society be allowed to use the facilities of a contract hospital, and the patient involved must be a private patient of the contract practitioner. It is the duty of the member of the Hillsborough County Medical Society to investigate thoroughly the status of the patient involved before the consultation is entered upon and the burden of proof is his sole responsibility."

EIGHTH DISTRICT—

HOWARD V. WEEMS, M.D. *Sebring*
Charlotte, Collier, DeSoto, Glades, Hardee, Hendry, Highlands, Lee, Polk.

The Eighth District has had a very harmonious year. Lee County Medical Society is composed of 15 active members with 100 per cent paid membership for the year.

Polk County Medical Society began the year 1941 with 60 members, added 5 new members, lost 4 who moved away. The following members are in military service: Dr. Jere W. Annis, Dr. Joe M. Bosworth, Jr., Dr. Theodore C. Keramidas, Dr. Emmett E. Martin, Dr. Raymond H. Ralston.

All members except two paid 1941 dues. At the January meeting Dr. Barry Wood of Johns Hopkins University gave a splendid paper on chemotherapy in pneumonia.

The De Soto - Hardee - Highlands - Charlotte - Glades County Medical Society has a membership of 21 with only 1 failing to pay his 1941 dues. No one has as yet entered military service but all are actively engaged in the Defense Program. Good programs have been given and meetings are well attended.

NINTH DISTRICT—

CARL D. HOFFMANN, M.D. *Orlando*
Brevard, Lake, Orange, Osceola, Seminole.

The District "E" meeting was held in Orlando at the Orange Court Hotel on November 1 with Dr. C. D. Hoffmann, Senior Councilor, presiding.

For the Scientific program Dr. T. M. Rivers of Kissimmee, presented a paper on "Relation of Vitamin B Complex to Human Pathology"; Dr. Don C. Robertson of Orlando read a paper on "The Use of Eucupin Solutions in the Production of Prolonged Postoperative Analgesia in Rectal Surgery"; and Dr. Arthur L. Walters of Miami Beach presented a paper on "Diabetes and Arteriosclerosis." The papers were well discussed by the various members.

Addresses were made by President Walter C. Jones, Secretary Shaler Richardson and Dr. Duncan Owens, Chairman of the Council. Dr. H. D. Van Schaick, chairman of the Association's Committee on Legislation and Public Policy, was present to make his report.

The visiting ladies were entertained at a tea at the home of Mrs. Gilbert Osincup during the afternoon.

A social hour was held at 6 p. m. followed at 7 o'clock by a dinner, which was well attended by the visiting physicians and their wives.

The total registration of the District "E" meeting was 61, of which number 42 were Association members, 4 were visitors and 15 were ladies.

ELEVENTH DISTRICT—

R. L. ELLISON, M.D. *Fort Lauderdale*
Broward, Palm Beach.

Realizing the duties of each true American citizen in this time of national and international stress and strain, we as practitioners of medicine accept our responsibility with due consideration of the problem involved both at home and abroad.

Close cooperation of the membership of our society must be fostered and maintained if the best results of our association are to be expected. With this in mind an effort to increase this cooperation has been attempted in our district.

Nearly a year ago, a joint meeting of the Palm Beach and Broward County Medical Societies was planned to bring the membership of this district into closer and more intimate association. It was therefore decided to invite the members of the Palm Beach County Medical Society to meet with the Broward County Medical Society in Fort Lauderdale. This meeting, which was well attended, was held on the evening of May 21 of last year. This date, coming shortly after the meeting of the State Association held in Jacksonville, was found to be desirable, since a review of the work done at that meeting was to be considered. A return meeting was held in West Palm Beach the 29th of last November, an invitation being extended to the Broward County Medical Society by the Palm Beach County Medical Society. This meeting was also well attended.

I feel that these meetings serve a worthwhile purpose and should be made a part of our yearly schedule.

REPORT OF FLORIDA DELEGATES TO A. M. A. HOUSE OF DELEGATES

*To the Members of the Executive Committee in
Session at Jacksonville, Jan. 4, 1942:*

The ninety-second annual session of the American Medical Association opened in Cleveland, Ohio, on June 2, 1941. The headquarters for the House of Delegates was the Hotel Statler. The two delegates from Florida were present at each session of the House of Delegates.

The Distinguished Service Award was voted to Dr. James Ewing of New York.

The Speaker, Dr. H. H. Shoulders, addressed the House on our duties and privileges in the practice of medicine.

President Nathan B. Van Etten delivered one of his usual scholarly addresses. The progress of medicine was pictured; how in the last few years changing social conditions are necessitating a change in certain policies that have held in years gone by. The dangers of the threatened socialization of the profession should be watched. There is a tendency for certain special, selfish interests to malign all efforts of the American Medical Association to practice ethical medicine for the good of all classes.

President-elect Frank H. Lahey followed with an address on the internal function of the Association, drawing special attention to the fact that the presidents are called upon to endanger their health trying to fulfill the many desires for their presence. He also called for the training of the younger members to take over the reins in the management of the affairs of the Association.

The reports of the various Councils and officers were read and referred to their respective committees.

There was presented a resolution to have a section for the General Practitioner. Many delegates did not feel this was feasible but it will undoubtedly be given a trial.

The matter of compensation for physicians examining draftees was brought up but it was thought that at present no request for remuneration should be made.

A resolution requesting that women physicians be made eligible for the Medical Reserve Corp was disapproved for the time does not permit changing the organization and there will be plenty of work at home.

There is considerable feeling among many members that the certification boards have gone too far in some instances. It was suggested that the American Medical Association have more control over them.

The Committee on Medical Preparedness made a report that showed the immense amount of work accomplished and the invaluable aid it had rendered to the government.

The Board of Trustees reported on the recent trial in Washington and it was thought wise to appeal the decision.

The Committee on Legislative Activities made a lengthy report showing the work of the Farm Security Administration and also the continued building of hospitals for the Veterans Administration.

Dr. F. W. Rankin of Lexington, Kentucky, was elected President-elect. Dr. Charles A. Dukes of Oakland, California, Vice President, and Drs. Olin West and Herman L. Kretschmer were re-elected secretary and treasurer respectively. Dr. E. E. Irons of Chicago was elected Trustee to fill out the term of the late Dr. A. A. Hayden. Dr. C. W. Roberts of Atlanta was elected Trustee in the place of Dr. T. S. Cullen whose term expired and who was not eligible for re-election.

St. Louis was selected as the site for the 1944 convention.

Florida was again represented on one of the reference committees.

The attendance was over 7,000.

Respectfully submitted,

EDWARD JELKS, M. D.

MEREDITH MALLORY, M. D.

ARE YOUR SOCIETY DUES PAID?

Each member is requested and urged to pay his 1942 dues to his county society secretary not later than February. For a number of reasons it is important that members pay their current dues this month. The By-Laws require secretaries of county medical societies to forward dues and the names of members of county medical societies to the State Association's secretary at least thirty days in advance of the annual meeting.

Each county medical society's representation in the House of Delegates will be one delegate for each twenty members (or major fraction thereof). It is important that President Jones have the names of delegates, from which to select appointments on the three reference committees of the House of Delegates. The earlier your county society dues and the names of official delegates are forwarded to the State Association's secretary, the better chance your society has for representation on these important committees.

Pay your 1942 dues at once and urge the secretary of your county medical society to forward his annual report by the end of February, if possible.

BIRTHS AND DEATHS

BIRTHS

Dr. and Mrs. Richard C. Cumming of Ocala announce the birth of a son, David Christopher, on December 18, 1941.

Capt. and Mrs. A. MacKenzie Manson, formerly of Jacksonville, announce the birth of a daughter, Jane Christian, on January 20 at Galveston, Texas.

DEATHS

Dr. Henry Bacon of Jacksonville died on February 8.

Dr. Z. Brantley of Grandin died on February 6.

STATE NEWS ITEMS

The Florida Board of Examiners in the Basic Sciences will hold its next examinations Monday, June 8, 1942 at the University of Florida, Gainesville.

All requests for application blanks should be sent to Dr. John F. Conn, Secretary, State Board of Examiners in the Basic Sciences, John B. Stetson University, DeLand. The Florida law requires that all applications be made at least fifteen days prior to the date of the examinations. May 23 is the deadline for mailing applications.

Dr. Lauren M. Sompayrac of Jacksonville was elected a Diplomate of the American Board of Dermatology and Syphilology at its December meeting.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, will deliver an address on quacks and quackery in the auditorium of the Florida State College for Women, Tallahassee, on Thursday, March 12, 1942, at 7:45 p. m. All members of the Florida Medical Association are invited to hear Dr. Fishbein.

Dr. Frank G. Slaughter of Jacksonville has completed a new book entitled "Spencer Brade, M.D.," which is scheduled for publication on March 20. A condensed form of about 40,000 words will appear in the Cosmopolitan magazine, probably in the April issue. "That None Should Die" was Dr. Slaughter's first novel.

Lieut. Cecil E. Miller, Medical Corps, Sarasota, now on duty at Tilton General Hospital at Fort Dix, New Jersey, has been promoted to the rank of Captain.

BENJAMIN EDGAR MILLER

Dr. B. E. Miller of New Smyrna Beach died at his home on December 22, following a long illness, at the age of 70.

Dr. Miller was born in Williston, S. C., and received his preliminary training in the schools of that state. He attended the University of Georgia Medical College at Augusta and later entered the College of Physicians and Surgeons of Baltimore, from which he received his M.D. degree in 1892.

Following his graduation, Dr. Miller practiced medicine in Claxton, Ga. for 36 years. He was a member and past president of the Tattnall-Evans County Medical Society and the district medical association. He was also a member of the Georgia Medical Association and the American Medical Association.

Dr. Miller took an active interest in church, fraternal and civic organizations, being affiliated with the Masonic Lodge, the Independent Order of Odd Fellows, the Knights of Pythias, the Elks, the Kiwanis Club and the Chamber of Commerce. He was a consistent member of the Baptist Church, having acted as a Deacon and Trustee for 25 years. For many years he was chairman of the Board of Trustees of the Claxton Schools and a trustee of the Brewton Parker Junior College at Mt. Vernon, Georgia.

Dr. Miller moved to New Smyrna Beach in 1926 due to ill health. After a short period of recuperation, he resumed active practice, in which he was engaged until about three years prior to his death. He was an active member of the Volusia County Medical Society and the Florida Medical Association.

Surviving are his wife, Mrs. Daisy Edwards Miller; two sons, Dr. Harold Edgar Miller, who has been associated with his father for the last ten years, and Benjamin Robert Miller; two brothers, Dr. Walter C. Miller of Miami, and Mr. J. C. Miller, Statesboro, Ga.; and one sister, Mrs. M. M. Smith of Claxton, Ga.

The following Resolutions were recently adopted by the Volusia County Medical Society:

RESOLUTIONS

WHEREAS, it has pleased the Great Physician to call from our midst our friend and fellow-worker, Dr. Benjamin E. Miller; and

WHEREAS, his interest and presence will be continually missed in the meetings of our Society; be it

RESOLVED, that we, the members of the Volusia County Medical Society, offer our profound sympathy and deep condolence to his bereaved wife and sons; and be it

RESOLVED, that a copy of this resolution be sent to his wife, a copy be spread upon our minutes and a copy be sent to the Florida Medical Association.

JOHN HERMAN MILLS

Dr. John H. Mills of Tampa died at his home on December 21, 1941, at the age of 70, after an illness of a year. For many years he had owned and operated the Mills Hospital, an institution for the treatment of nervous and mental diseases.

Dr. Mills received his medical training at Jefferson Medical College, Philadelphia, from which he was graduated in 1895.

He is survived by his widow, Mrs. Elizabeth Mills, who before her marriage was Miss Elizabeth E. Bryan of Tampa; a brother, William Mills, and a niece of Amsterdam, Holland.

COMPONENT COUNTY SOCIETIES

BAY

The following officers have been elected by the Bay County Medical Society: president, Dr. M. F. Parker, Panama City; vice president, Dr. J. Powell Adams, Panama City; secretary-treasurer, Dr. W. C. Roberts, Panama City. Dr. W. C. Roberts has been named delegate to the state convention with Dr. J. P. Adams as alternate.

BREVARD

Dr. Grambow Thomsen-von Colditz of Cocoa has been elected president of the Brevard County Medical Society. Other officers are: vice president, Dr. G. E. Christie, Titusville; secretary-treasurer, Dr. I. K. Hicks, Melbourne. Dr. T. C. Kenaston of Cocoa has been named delegate to the annual convention with Dr. I. M. Hay as alternate.

BROWARD

Officers elected by the Broward County Medical Society for 1942 are: president, Dr. Elbert McLaury, Hollywood; vice president, Dr. David W. Harris, Ft. Lauderdale; and secretary-treasurer, Dr. O. C. Brown, Ft. Lauderdale.

COLUMBIA

The 1941 officers of the Columbia County Medical Society were re-elected for 1942 at a meeting held recently. Dr. H. S. Howell of Lake City is president of the Society and Dr. T. H. Bates, also of Lake City, is secretary-treasurer.

DADE

At the annual meeting of the Dade County Medical Society, held on December 3, the following officers were elected: president, Dr. T. O. Otto, Miami; vice president, Dr. Robert T. Spicer, Miami; secretary, Dr. Herbert Eichert, Miami; and treasurer, Dr. Ralph Sappenfield, Miami.

FRANKLIN-GULF

Officers elected by the Franklin-Gulf County Medical Society for 1942 are: president, Dr. Thomas Meriwether, Wewahitchka; vice president, Dr. L. H. Bartee, Port St. Joe; and secretary-treasurer, Dr. J. R. Norton, Port St. Joe.

LAKE

At the annual meeting of the Lake County Medical Society, the following officers were elected: president, Dr. Louis R. Bowen, Eustis; vice president, Dr. H. Spurgeon Cherry, Center Hill; and secretary-treasurer, Dr. Clyde F. Bowie, Leesburg. Dr. L. R. Bowen was named delegate to the next annual meeting of the State Association.

LEE

Serving the Lee County Medical Society as officers for the current year are: president, Dr. Harvie J. Stipe, Ft. Myers; vice president, Dr. H. Quillian Jones, Ft. Myers; and secretary-treasurer, Dr. A. Louis Girardin, Ft. Myers. Dr. Jones is the delegate and Dr. Stipe the alternate to the House of Delegates of the Florida Medical Association.

MADISON-SUWANNEE

Dr. Eustace Long of Madison is serving as president of the Madison-Suwannee County Medical Society. Dr. E. D. Thorpe of Madison is the secretary-treasurer.

MANATEE

The following officers have been elected by the Manatee County Medical Society: president, Dr. L. W. Blake, Bradenton; vice president, Dr. W. D. Sugg, Bradenton; secretary-treasurer, Dr. M. M. Harrison of Bradenton. Dr. T. M. McDuffee has been named delegate and Dr. Blake Lancaster is the alternate delegate.

MARION

Officers of the Marion County Medical Society for 1942 are: president, Dr. B. S. Stutts, Dunnellon; vice president, Dr. E. G. Lindner, Ocala; secretary-treasurer, Dr. T. Hartley Davis, Ocala. The society will be represented at the state annual convention by Dr. E. G. Peek, delegate, and Dr. Harry Watt, alternate.

MONROE

Dr. Harry C. Galey of Key West has been re-elected president of the Monroe County Medical Society and Dr. William R. Warren of Key West has been renamed secretary.

ORANGE

Dr. Spencer Folsom of Orlando has been named president of the Orange County Medical Society. Other officers are: Dr. T. E. McBride, Apopka, vice president; Dr. Edgar Hitchcock, Orlando, secretary; and Dr. Hollis Ingram, Orlando, treasurer.

PALM BEACH

The election of officers for 1942 by the Palm Beach County Medical Society resulted as follows: president, Dr. James R. Sory, West Palm Beach; vice president, Dr. William H. Weems, West Palm Beach; secretary, Dr. David W. Martin, West Palm Beach; and treasurer (re-elected) Dr. Frederick K. Herpel, West Palm Beach.

PASCO-HERNANDO-CITRUS

A meeting of the Pasco-Hernando-Citrus County Medical Society was held on the evening of January 8 at the home of Dr. and Mrs. Stanley T. Simmons in Dade City. Mrs. Simmons served a full course chicken dinner which was enjoyed by all those present. All members expressed their disappointment in the absence of Dr. Simmons, who had been called to Louisville on business.

After dinner a scientific session was held. Clinical cases were reported by Drs. J. T. Bradshaw, W. H. Walters, W. Wardlaw Jones and P. J. Hudson.

Those enjoying the hospitality of Mrs. Simmons were: Drs. J. T. Bradshaw, W. W. Jones and R. D. Sistrunk of Dade City; Dr. P. J. Hudson, Crystal River; Dr. W. H. Walters, Lacoochee; Drs. S. C. Harvard and G. R. Creekmore of Brooksville.

PINELLAS

At the meeting of the Pinellas County Medical Society held on the evening of January 2, the following papers were presented: "Vitamins in Pregnancy," Dr. C. O. Anderson; "Scope of Proctology," Dr. C. E. Hebard; "Recent Advances in Anesthesia Technic," Dr. J. B. Quicksall.

On the evening of January 16 the Society held its second meeting of the month, which took the form of a round table conference. Dr. R. W. S. Owen acted as moderator.

PUTNAM

The following officers have been elected by the Putnam County Medical Society: president, Dr. J. Worth Brantley, Grandin; secretary-treasurer, Dr. Allen P. Gurganious, Palatka.

ST. JOHNS

Officers for the St. Johns County Medical Society for 1942 are: president, Dr. W. D. Webb, St. Augustine; vice president, Dr. R. D. Harris, St. Augustine; secretary, Dr. Charles C. Grace, St. Augustine; and treasurer, Dr. Herbert E. White, St. Augustine. Dr. White will represent the Society at the next state annual convention as delegate; Dr. Webb is the alternate delegate.

SEMINOLE

Dr. C. L. Park of Sanford is the new president of the Seminole County Medical Society. Other officers are: vice president, Dr. George H. Putnam, Sanford; secretary-treasurer, Dr. Orville L. Barks, Sanford. Dr. George H. Putnam has been named delegate and Dr. G. S. Selman alternate delegate to the state convention in April.

TAYLOR

The Taylor County Medical Society recently became the first society to report 100 per cent of its dues for 1942. Officers for this year are: president, Dr. J. C. Ellis, Perry; and secretary-treasurer, Dr. C. A. O'Quinn, Perry.

WALTON-OKALOOSA

To the Walton-Okaloosa County Medical Society goes the distinction of being the second society to be placed on the Honor Roll of 100 per cent paid societies. Serving as officers for 1942 are: Dr. Arthur G. Williams, Lakewood, president, and Dr. Ralph B. Spires, Defuniak Springs, secretary-treasurer.

WASHINGTON-HOLMES

The following officers have been elected by the Washington-Holmes County Medical Society: president, Dr. N. J. Dawkins, Vernon; secretary-treasurer, Dr. B. W. Dalton, Vernon.

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

MEDICAL ASPECTS OF THE SELECTIVE SERVICE SYSTEM, SASLAW, MILTON S., CAMP SHELBY, WAR MED. 1:486-492 (JULY) 1941.

The author, Chief of the Medical Induction Board at Camp Shelby, discusses numerous aspects of medical examination under the selective service act.

He emphasizes the necessity of interpreting the standards on the basis of two fundamental principles. First, can the prospective soldier perform his term of duty and be valuable as a reservist for 10 years without injuring himself. Second, can he be reasonably expected to perform his duty without becoming a burden to the government.

The percentage of rejections has become progressively greater owing to the increased efficiency of army examiners, to the fact that the examiners have had an opportunity of witnessing the causes of discharge after periods of hospitalization for physical disability, and to a different viewpoint in the interpretation of physical standards as provided by the army.

The most frequent causes of rejection were, in order, pes planus, musculoskeletal defects, hemorrhoids, defective vision, hernia, underweight and lack of sufficient teeth.

The author also makes a suggestion to alleviate the great expense associated with the rejection of these applicants who are sent to the various camps, namely, a traveling board of army physicians to work in definite localities or cities.

INTUSSUSCEPTION ASSOCIATED WITH A POLYP IN A MECKEL'S DIVERTICULUM, BOWEN, FRED H., JACKSONVILLE, J.M.A. GEORGIA 30:390-391 (SEPT.) 1941.

Bowen reports a case of intussusception associated with a polyp in a Meckel's diverticulum in a 14 year old boy. The child was seized with cramping pains in the lower right quadrant which became progressively worse, resulting finally in extreme rigidity of the entire right portion of the abdomen. Under anesthesia a large orange-sized mass was palpated. The intussusception was reduced, and the appendix and Meckel's diverticulum removed. The latter, when turned inside

out, revealed a walnut-sized polyp. Postoperative recovery was uneventful.

The author reviews the previous literature pertinent to the subject.

ADVERTISERS' NOTES

IRVINGTON HOUSE RECEIVES AWARD

An award of \$1,000 to assist the outstanding work done by Irvington House, of Irvington-on-Hudson, N. Y., in the study and treatment of rheumatic fever, has been made by The Borden Company.

The sum was presented recently at a meeting of the directors of the institution by William Callan, Vice President of The Borden Company and also a director of Irvington House.

The researches, conducted under direction of Dr. Ann G. Kuttner, Resident Medical Director, with the guidance of a Medical Advisory Board, of which Dr. J. Murray Steele, Director of the Third Medical Division, Welfare Hospital, New York City, is Chairman, have made Irvington House outstanding in this field.

Known as "The House of Mending Hearts," it houses about one hundred young, underprivileged patients. Its work on rheumatic heart disease, and its high standard for the care of patients have brought to Irvington House great distinction as an experimental heart-saving sanatorium and training center and has brought forth inquiries from as far as South America and Australia on the matter of setting up of convalescent homes for cardiac youngsters.

As an educational spearhead, Irvington House has been particularly energetic in bringing to the attention of the public how great the menace of rheumatic heart disease is. The United States Public Health Service regards this disease as one of the great American perils.

Specialized care and supervised living are provided for many months for underprivileged children afflicted with the ailment, so that they may be fortified in body and spirit to assume their rightful roles as useful citizens.

WHAT EVERY WOMAN DOESN'T KNOW—

HOW TO GIVE COD LIVER OIL

What Every Woman Doesn't Know is that psychology is more important than flavoring in persuading children to take cod liver oil. Some mothers fail to realize, so great is their own distaste for cod liver oil, that most babies will not only take the oil if properly given, but will actually enjoy it. Proof of this is seen in orphanages and pediatric hospitals where cod liver oil is administered as a food in a matter of fact manner, with the result that refusals are rarely encountered.

The mother who wrinkles her nose and "makes a face" of disgust as she measures out cod liver oil is almost certain to set the pattern for similar behavior on the part of her baby.

Most babies can be taught to take the pure oil if, as Eliot points out, the mother looks on it with favor and no unpleasant associations are attached to it. If the mother herself takes some of the oil, the child is further encouraged.

The dose of cod liver oil may be followed by orange juice, but if administered at an early age, usually no vehicle is required. The oil should not be mixed with the milk or the cereal feeding unless allowance is made for the oil which clings to the bottle or the bowl.

On account of its high potency in Vitamins A and D, Mead's Cod Liver Oil Fortified With Percomorph Liver Oil may be given in one-third the ordinary cod liver oil dosage, and is particularly desirable in cases of fat intolerance.



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.

PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

A Timely Prescription ... is wholesome

CHEWING GUM



You please your little patients and the older ones, too, with this good-will gesture. This favorite all-American treat is so good ... and good for you. Chewing Gum doesn't take the edge off normal appetites and the healthful chewing is so satisfying.

What's more ... many persons who enjoy chewing Gum regularly find it helps keep them on their toes, yet at the same time helps relieve excess tension and fatigue. Try it. Get some today.

W-74

You of the medical profession, giving so generously of yourselves in these days of stress, can also enjoy this refreshing sense of a little pick-up from Chewing Gum. And, as you know, the chewing aids digestion and helps promote mouth hygiene.

NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, President.....Miami
 MRS. F. W. KRUGER, First Vice-President.....Jacksonville
 MRS. R. L. CLINE, Second Vice-President.....Lakeland
 MRS. PAUL KELLS, Corresponding Secretary.....Miami
 MRS. H. A. LEAVITT, Recording Secy.-Treas.....Miami
 MRS. M. J. FLIPSE, Historian.....Miami
 MRS. L. C. INGRAM, Parliamentarian.....Orlando

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity.....Jacksonville
 MRS. P. J. MANSON, Hygiene.....Miami
 MRS. RUPERT STOVALL, Public Relations.....Ft. Lauderdale
 MRS. E. M. HENDRICKS, Legislation.....Ft. Lauderdale
 MRS. GORDON H. IRA, Finance.....Jacksonville
 MRS. T. C. KENASTON, Exhibits.....Cocoa
 MRS. CLYDE ANDERSON, Archives.....St. Petersburg
 MRS. GEORGE C. TILLMAN, Student Loan.....Gainesville
 MRS. F. W. KRUEGER, Program.....Jacksonville
 MRS. R. L. CLINE, Organization.....Lakeland
 MRS. JOHN H. OWENS, Bulletin.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B".....Gainesville
 MRS. E. W. VEAL, Northeast "C".....Jacksonville
 MRS. J. C. GRIFFIN, Southwest "D".....Tampa
 MRS. W. C. PAGE, South Central "E".....Cocoa
 MRS. HILLARD WILLIS, Southeast "F".....Coral Gables

To County Publicity Chairmen:

In order to make our page in the Florida Medical Journal more interesting and helpful, and to show our gratitude for the space allotted to us by the Editor it is necessary that all county publicity chairmen send in regular news items before the 25th of each month as this is the deadline for publication. These items should be addressed to Mrs. S. M. Copeland, Publicity Chairman, 1356 Willow Branch Ave., Jacksonville. Immediately following your Auxiliary meetings, the publicity chairman should send a writeup, which has been approved by the president, to your local newspapers, covering information regarding important announcements, projects, speakers, programs, educational and social features.

Two newspaper clippings are to be sent to me, and at the end of the year I shall turn them over to our State Historian for the Scrap Book which we try to exhibit every year at the national convention of the American Medical Association. This Scrap Book is a history of your Auxiliary and mine and one that we should be proud of. You are contributing each month something to this Scrap Book; is it a blank report or a nicely written report of the things you are doing in your local Auxiliary? You are making history, but what kind of history? We are beginning a New Year with a clean sheet on which to record the activities of our various groups. Won't you

give just a little more time and thought to this department by sending in your reports promptly for publication in the Florida Medical Journal?

There's a sweet ol' story translated for man

But writ in the long, long ago.

The gospel, according to Mark, Luke and John
 Of the Great Physician and his mission below.

You are writing a gospel, a chapter each day

By deeds that you do, by words that you say.

Men read what you write whether faithless or true.

Say, what is the gospel according to you?

Men read and admire the gospel of the Great
 Physician

With its love so unfailing and true

But what do they say and what do they think

Of the gospel, according to you?

'Tis a wonderful story, that gospel of love

As it shines in the Christ like divine

And O, that its truth might be told again

In the story of your life and mine.

Unselfishness mirrors in every scene,

Love blossoms on every sod.

And back from its vision, comes the heart

To tell the wonderful goodness of the Great Physi-
 cian.

We are writing each day a letter to men

Let's take care that the writing is true

'Tis the only gospel some men will read

That gospel according to you and me.

Faithfully yours,

(MRS. S. M.) MINNIE R. COPELAND, Chairman
 State Press and Publicity.



WOMEN IN NATIONAL DEFENSE

Realizing the importance of the National Defense Program, and with the strong appeal made by our state president, Mrs. W. J. Barge, following the A. M. A. meeting at Cleveland, still ringing in my ears, I am all the more impressed with this message from Mrs. Frank N. Haggard, President-elect, of the Woman's Auxiliary to the American Medical Association, which I am passing on to you. I hope that it will be read before every county auxiliary and that it may arouse in each of us a deeper loyalty and more abiding faith in our American homes and make us more conscious of our divine duty to our country. Mrs. Haggard says in part:

Defense has easily become the most popular word in the American vocabulary. How can we interpret defense in terms that apply to the individual? First of all in health. The mechanism for the protection of any nation is a matter of routine, initiated and supported by strong loyal citizens. Keen minds and sound bodies both depend upon nutrition, and nutrition is largely the woman's problem. Every home and all the members of each family must feel that importance of cooperation in the great plans that mark this country as the one that can determine the final outcome in the struggle for the continuance of the principles of freedom.

KOROMEX DIAPHRAGM



KOROMEX TRIP-RELEASE INTRODUCER

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

Defense demands healthy Americans. Recent federal investigation disclosed that forty-five million Americans are not getting enough or the right kind of foods. As a patriotic duty, it behooves those who are the moving spirits in their communities to make available to all the useful facts regarding this subject, which is the keystone in the foundation of health. In a recent address the President of the United States said, "I call upon our people with absolute confidence that our common cause will succeed." The women, homemakers of the nation, can contribute immeasurably to the cause of national safety through their influence in the field of health and especially in the matter of food.

In time of war as well as in time of peace, the nutrition of people must be maintained. This involves not only an adequate supply of necessary foods, but a knowledge of how such foods should be used and a disposition to use them intelligently without waste. This is a life and death struggle for our country and we are engaged in a battle of production in which every man, woman and child has a place.

Our mental as well as our physical health demands attention. The creation of war hysteria or "war nerves" is a powerful weapon in the hands of the enemy. It is by disrupting the morale that the Nazi war machine has been most effective. The only sure method for keeping the nation truly fit is to make sure that all its citizens are keeping their mental and physical strength up to the highest possible point. Each and every one of us can do our part in this program by intelligent living and intelligent thinking.

About a hundred years ago a few women in this country began an active campaign to free themselves from laws and customs which had restricted their activities both in the home and society. Today, a century later, women in the United States have educational, legal, political, and economic opportunities such as exist in no other country in the world. They have more—they have power. Man, at first perhaps reluctantly, has come now to recognize fully the importance of women in the economic life of this country. Today a woman views herself as a citizen among citizens and realizes that she must share the responsibility of preserving our American way of life.

Democracy has given much to women and now they must give in return in its preservation. European events tell them why. For much more than just the rights of women have been destroyed in Europe and much more than the rights of women are at stake in America. This is recognized in the programs of women's organizations; their alert interest in our national set-up, drawing on the time and talents of women throughout the country.

We find women in charge of government and private defense work. The Red Cross with its courses in canteen work or surgical dressing, the Women Fliers of America with aviation or parachute folding, courses in air raid precautions, motor corps, or map-reading with the American Women's Voluntary Service, or practical nursing with the Y. W. C. A., these are only a few of the many types of skills for which volunteers are now being trained. It is quite natural then, that physicians' wives, as a medical auxiliary unit, would devote their attention to health education and nutrition. Perhaps never before since the early pioneer days have women had as much opportunity to be of service to their country as they have now. Women can teach their children and their communities to have faith in America and in their homes, that there is no substitute for freedom—political, social and economic. They can preserve democratic institutions while large numbers are away from their home towns in training camps.

We need to know America and have an understanding of our institutions and the source of our liberties. If we want representative democracy, we must understand how it works. If we want civil religious liberties, we must understand what it means to safeguard the rights of every American. If we want free enterprise, we must learn what makes our industrial wheels go round. We need to be sure that we know what it is that we call

America, the American way. The crisis is not concerned with the position of women but with the position of democracy.

As mothers, as women, as freedom loving human beings, women have a great stake and responsibility in this struggle. Women are crusaders. If they will again choose an objective which seems as important to them as the vote and if they will work as they did then, nothing can stop them from attaining that objective. They have found it now in making democracy work and survive, or stating it in another way, in establishing a pattern for a free world.

The woman's point of view is valuable at the present time. Few of us realize how women have been deprived of human rights in those countries that have ceased to be democracies; therefore, it is urgent that American women today devote themselves to guarding not only the democratic form of government but its ideals which assert equality of opportunity in economics and in our social institutions. This has come to mean equality between men and women, not in a spirit of competition but a unity of purpose.

I believe that we as members of the Woman's Auxiliary to the American Medical Association should carry on the torch of fortitude, courage and faith handed down to us by our feminine forebears who stood strong at Plymouth, Jamestown, Cumberland Gap, and in the wilderness and on the prairie to make possible the security, ease, and freedom which our Christian forefathers left us as our heritage, that the world may know that we have "kept the faith."

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

PATRONIZE JOURNAL ADVERTISERS

OUR ADVERTISERS BEAR THE STAMP OF APPROVAL OF THE AMERICAN MEDICAL ASSOCIATION AND ALSO OF THE FLORIDA MEDICAL ASSOCIATION. THEY ARE WORTHY OF THE PATRONAGE OF OUR MEMBERS.

*Combine The Functions of Many Instruments
with*

The STEREO ORTHOPTOR



No other single orthoptic instrument has the wide range for diagnostic and remedial procedures as has the Stereo Orthoptor by American Optical Company. - The instrument enables the practitioner to separate the difficult and often hopeless cases from the ones that will respond to training. The remedial range of the Stereo Orthoptor includes reduction of amblyopia, the elimination of uniocular suppression, the rehabilitation of vergence functions, binocular co-ordination, and the training of stereoscopic perception. The flexibility of the instrument permits the use of a great variety of techniques.

★ ★ ★ American Optical Company ★ ★ ★

*convention
press*

two eighteen west church street
jacksonville, florida



*printers
publishers*

The Next Meeting of the
FLORIDA MEDICAL ASSOCIATION
will be held at
Palm Beach, April 13, 14, 15, 1942

Ambulance Directory

COMBS FUNERAL HOMES
Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.
1201 South Olive
WEST PALM BEACH, FLA.

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison) RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Walter C. Jones, Miami.....	Shaler Richardson, Jacksonville.....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
A—Northwest	William C. Roberts, Panama City.....	Stewart Thompson, Jacksonville.....	Panama City, 1942
B—North Central	Alva T. Cobb, Gainesville.....	“ “ “	Ocala, 1942
C—Northeast	Maximilian Stern, Daytona Beach.....	“ “ “	Jacksonville, 1942
D—Southwest	Howard V. Weems, Sebring.....	“ “ “	Sarasota, 1942
E—South Central	Carl D. Hoffmann, Orlando.....	“ “ “	Cocoa, 1942
F—Southeast	Robert L. Elliston, Ft. Lauderdale.....	“ “ “	Miami, 1942
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery.....	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta.....	E. D. Shanks, Atlanta.....	Augusta, Apr. 28-May 1, 1942
Florida—			
Section, Am. College Phys.....	W. W. George, W. Palm Beach.....	Kenneth Phillips, Miami.....	Palm Beach, Apr. 12-13, 1942
Dental Society, State.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	Tampa, June 13, 1942
Derm. and Syph., Soc. of.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association.....	T. C. Kenaston, Cocoa.....	I. M. Hay, Melbourne.....	Melbourne, 1942
Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	Tampa, June 13, 1942
Industrial Surgeons, Assn. of.....	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman.....	Jacksonville, June 22-27, 1942
Nurses Association, State.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine.....	Orlando, November, 1942
Ophthal. & Otol., Soc. of.....	S. B. Forbes, Tampa.....	C. E. Dunaway, Miami.....	Palm Beach, Apr. 12-13, 1942
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables.....	G. N. Leonard, Miami Beach.....	Palm Beach, Apr. 12-13, 1942
Pharmaceutical Association, State.....	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association.....	W. H. Pickett, Jacksonville.....	Lloyd N. Harlow, Jacksonville.....	
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association.....	J. W. Alsobrook, Plant City.....	W. C. Page, Cocoa.....	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Gulf Coast Clinical Society.....	G. G. Oswalt, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
S.E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	Memphis, May, 1942
Southeastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association.....	M. Pinson Neal, Columbia, Mo.....	Mr. C. P. Loran, Birmingham.....	Richmond, November, 1942
Suwannee River Medical Society.....	L. J. Arnold, Jr., Lake City.....	T. H. Bates, Lake City.....	

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	M. F. Parker, M.D. Panama City	W. C. Roberts, M.D. Panama City		10	2	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	A. L. Stebbins, M.D. State Bd. of Health Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	50	27	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. Defuniak Springs	3rd Thursday 8:00 P. M.	6	100%	
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		6		
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Tuesday Odd Months	5	3	
	Jackson *Calhoun	W. R. Wandeck, M.D. Marianna	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	7	
B	Leon-Gadsden- Liberty-Wakulla- Jefferson	G. H. Garmany, M.D. Tallahassee	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	38	4	A-2-'43 C. D. Whitaker, M.D. Marianna
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	11	9	
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	1	
	Taylor *Dixie, Lafayette	J. C. Ellis, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	5	100%	
	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	A. T. Cobb, M.D. 331 W. University Ave. Gainesville	2nd Wednesday 7:30 P. M.	31	8	
	Marion *Levy	B. S. Stutts, M.D. Anderson Bldg. Dunnellon	T. Hartley Davis, M.D. 202 Commercial Bank Ocala	3rd Thursday 12:30 P. M.	26	9	
C	Pasco-Pernando- Citrus	J. T. Bradshaw, M.D. San Antonio	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	8	B-3-'43 J. M. Price, M.D. Live Oak
	Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P. M.	185	12	
	St. Johns	W. D. Webb, M.D. 220 St. George St. St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	10	1	
	Putnam	J. Worth Brantley, M.D. Grandin	Allen P. Gurganious, M.D. Palatka	2nd Tuesday Even Months 7:00 P. M.	11	5	
	Volusia *Flagler	J. R. Chandler, M.D. 110 S. Ridgewood Ave. Daytona Beach	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	44	12	
	Hillsborough	B. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	101	45	
D	Manatee	L. W. Blake, M.D. Bradenton	M. M. Harrison, M.D. Professional Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	2	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	103	63	
	Sarasota	John C. Patterson, M.D. Palmer Natl. Bk. Bldg. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	17	1	
	DeSoto-Hardee- Highlands-Char- lotte-Glades		G. H. McSwain, M.D. Arcadia	2nd Tuesday 8:00 P. M.	19		
	Lee *Collier, Hendry	Harvie J. Stipe, M.D. 312 Pythian Bldg. Fort Myers	A. Louis Girardin, M.D. 309 Pythian Bldg. Fort Myers	3rd Tuesday 7:30 P. M.	17	1	
	Polk	J. R. Boulware, M.D. Box 367 Lakeland	Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	62	1	
E	Brevard	G. T. von Colditz, M.D. Route 1 Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11		D-7-'43 John R. Boling, M.D. Tampa
	Lake *Sumter	Louis R. Bowen, M.D. Box 905 Eustis	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	18	2	
	Orange *Osceola	Spencer A. Folsom, M.D. 319 Exchange Bldg. Orlando	E. E. Hitchcock, M.D. 7 E. Colonial Dr. Orlando	3rd Wednesday 8:30 P. M.	87	11	
	Seminole	C. L. Park, M.D. 515 1st Nat. Bank Bldg. Sanford	O. L. Barks, M.D. Sanford Clinic Sanford	2nd Monday 7:00 P. M.	12	1	
	St. Lucie-Okeech- bee-Indian River- Martin	R. C. Boothe, M.D. Box 408 Ft. Pierce	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	17	14	
	Broward	Elbert McLaury, M.D. 210 Hollywood Bk. Bldg. Hollywood	O. C. Brown, M.D. 915 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	38	4	
F	Palm Beach	James R. Sory, M.D. 616 Harvey Bldg. W. Palm Beach	D. W. Martin, M.D. 618 Comeau Bldg. W. Palm Beach	4th Monday 8:00 P. M.	66	4	D-8-'42 H. V. Weems, M.D. Sebring
	Dade	Thomas O. Otto, M.D. 704 Huntington Bldg. Miami	Herbert Eichert, M.D. 537 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	331	36	
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	1	

*Supervise and aid until organized separately.



Copyright 1940, Mead Johnson & Co.

I WANT MORE PABLUM!

PABLUM
originated
IN 1933

Pablum is a palatable mixed cereal food, vitamin and mineral enriched, composed of wheatmeal (farina), oatmeal, wheat germ, yellow cornmeal, powdered beef bone, sodium chloride, alfalfa leaf, powdered yeast, and reduced iron, thoroughly cooked and dried. Pablum needs no further cooking, and can be prepared directly in the cereal bowl simply by adding milk or water, hot or cold. During the past decade, Pablum has been the basis of many significant clinical studies and is mentioned favorably in numerous medical textbooks and papers. Bibliography on request.

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U.S.A.

NEW YORK ACADEMY OF
MEDICINE
2 E 103RD ST

ATTENTION! IMPORTANT NOTICE!

Hollywood Beach Hotel at Hollywood will be convention headquarters, owing to cancellation of Palm Beach Biltmore Hotel. See Page 438-A, this Journal.

The JOURNAL *of the* Florida Medical Association, Inc.

Vol. XXVIII

MARCH, 1942

No. 9

THE N.Y. ACADEMY
OF MEDICINE
MAR 21 1942
LIBRARY

CONTENTS

The Public Health Laboratory and the Private Practitioner, J. N. Patterson, M.D., Jacksonville	427
Unrecognized Importance of Minor Injuries, Lloyd J. Netto, M.D., West Palm Beach	431
The Yesterday of Medicine, M. A. Nickle, M.D., Clearwater	433
Palm Beach, the Convention City	438
Your Attendance Urged	439
Program of the Sixty-Ninth Annual Meeting	440
Daniel C. Elkin, M.D., Our Guest of Honor	447
Editorials: War Problems; Notice to Delegates and Committee Chairmen; Graduate Short Course	448
The Technical Exhibit	448
Births and Marriages	450
State News Items	450
Component County Societies	452
Books Received	453
Bureau of Professional Relations	453
Abstract Department	454
Advertisers' Notes	454
Woman's Auxilliary	458
State and Sectional Meetings	461
Component Societies by Districts	462

Come and get it!



• Look at him go! First in any chow line, this rookie's enthusiastic gorging is offset, fortunately, by a strenuous program of exercise. His counterpart among the "Rocking Chair Brigade" still has to be considered. When over-indulgence and lack of exercise are causative factors in constipation, relief may often be obtained with Petrogalar.*

It helps to soften thoroughly the stool and encourages regular, comfortable bowel movement. Petrogalar is acceptable even with "stuffy" patients because of its pleasant taste and ready miscibility in water.

It may be taken directly from the spoon or from a glass. Consider Petrogalar for the treatment of constipation.



FOR THE TREATMENT OF CONSTIPATION

Petrogalar



*Reg. U. S. Pat. Off. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 65 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.

Petrogalar Laboratories, Inc. • 3134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

These are the Reasons why we say "Try S-M-A"



➤ Physicians will find that S-M-A* is not a "compromise formula." It is a complete milk formula for infants deprived of human milk.

➤ Cows' milk fat is replaced with the unique S-M-A fat for easy digestion and adequate nutrition. It compares physically, chemically and biologically with the fat in human milk.

➤ The carbohydrates in S-M-A and human milk are identical.

➤ With the exception of vitamin C, the vitamins essential to normal growth and development (B₁, D, and A) are included in adequate proportion in S-M-A ready to feed.

➤ Furthermore, iron (so difficult to provide for the bottle-fed infant) is included in S-M-A. When prepared each quart provides 10 mg. iron and ammonium citrate.

* * * * *

Excellent results with hundreds of thousands of infants is reason enough why S-M-A is the choice of a steadily increasing number of physicians.

Try S-M-A. Results tell the true story more aptly than words and pictures.

*S-M-A, a trade mark of S.M.A. Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addition of milk sugar and potassium



chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla.

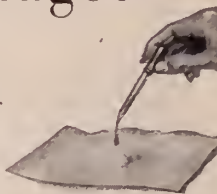
Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924

DIABETIC SUGAR TEST

Galatest offers you 6 Advantages

Galatest, the convenient "spot test" for diabetic sugar, is a *dry* reagent. One drop of urine on a little Galatest powder gives an *immediate* reaction of *dependable* accuracy. A modification of Nylander's bismuth solution, Galatest offers you these *six* advantages:



COLOR CHART WITH EACH VIAL

Free Booklet on Request

ACCEPTED FOR ADVERTISING IN THE JOURNAL
OF THE AMERICAN MEDICAL ASSOCIATION

Galatest

1. Accuracy
2. Selectivity
3. Instantaneous reactions
4. No test tubes
5. No boiling apparatus
6. No washing up afterwards

The Denver Chemical Mfg. Co.
163 Varick St., New York, N. Y.

This Booklet Will Be Sent To You On Request



THIS new booklet on "The Laryngoscope as a Diagnostic Aid for the General Practitioner" is intended as an aid in the recognition of common laryngeal diseases. It will be sent to you on request, without obligation to you. Of course, this is not a complete treatise on laryngeal examination, but we believe that the material will aid any practicing physician in making a laryngeal examination. Request your copy from the Instrument Division, American Optical Company, Southbridge, Massachusetts.

AMERICAN OPTICAL COMPANY



SHOCK ABSORBER

Theelin acts as a therapeutic cushion to help absorb the physical and mental shocks so often caused by ovarian hypofunction during the menopause. Theelin accomplishes this by replacing or supplementing declining ovarian secretion until such time as the endocrine system can adjust itself to the hormonal deficiency. Its clinical reputation is firmly established on the basis of millions of doses successfully used. Indications: the climacteric, senile vaginitis, kraurosis vulvae, gonorrheal vaginitis in children, and certain other conditions due to estrogenic insufficiency. Theelin was the first estrogen to be isolated in pure crystalline form. Each lot is physiologically and chemically standardized before release by the laboratories of Parke, Davis & Company and by the Biochemical Laboratory of St. Louis University. Theelin Suppositories for vaginal use and Kapseals Theelol for oral administration are available where sustained therapy between injections is desired.



Ampoules
THEELIN* and **Theelol***

products of modern research offered to the
medical profession by

*Reg. U. S. Pat. Off.

PARKE, DAVIS & COMPANY DETROIT, MICHIGAN
OVER SEVENTY-FIVE YEARS OF SERVICE TO MEDICINE AND PHARMACY



All-out efforts for a successful conclusion of hostilities demand the hands, brains and hearts of every American. Maintenance of maximum efficiency requires a healthy, well-nourished body. Our men in the armed forces are assured of nutritionally balanced meals, but, the folks at home also need proper nourishment so that they can do

their jobs . . . so important to the men in the field.

COCOMALT, daily, is an excellent "defense" addition to meals. More and more, physicians are recommending this delicious drink for the entire family. This enriched food drink contains vitamins A, B₁ and D as well as the minerals, calcium, phosphorus and iron.



A New Clinical Study has again shown the value of COCOMALT in therapeutic diets. Have you sent for your copy of "The Use of a Malted Food Preparation as a Dietary Supplement in Pulmonary Tuberculosis"?

Cocomalt *Enriched Food Drink*

R. B. DAVIS COMPANY • Hoboken, N. J.

WE'VE MADE IT MORE *Convenient* AND
Economical TO USE *Amniotin...*

THERE'S little question about the effectiveness of Amniotin in relieving menopausal symptoms . . . that's been proved by a great number of clinical reports published during the past twelve years. Amniotin has also proved effective in other conditions related to deficiency of estrogenic hormone . . . senile vaginitis . . . kraurosis vulvae . . . pruritus vulvae . . . gonorrheal vaginitis in children.

Important to users of estrogens is the fact that Amniotin is now available in 10-cc. and 20-cc. diaphragm-capped vials. These new "bulk packages" provide two advantages . . . economy and convenience. The wide variation in requirements of women with menopausal symptoms can be met by simply withdrawing the proper dosage from the vial. The new vial packages provide a substantial saving over the cost of Amniotin in ampuls . . . without sacrifice of activity, uniformity or stability.

Differing from estrogenic substances containing or derived from a single crystalline factor, Amniotin is a highly purified, non-crystalline preparation of naturally occurring estrogenic substances derived from pregnant mares' urine. Its estrogenic activity is expressed in terms of the equivalent of International units of estrone.



HOW SUPPLIED

AMNIOTIN IN OIL—For Intramuscular Injection

2,000 I.U. per 1 cc. ampul, boxes of 6, 25, 50
5,000 I.U. per 1 cc. ampul, boxes of 6, 50
10,000 I.U. per 1 cc. ampul, boxes of 3, 25, 50
20,000 I.U. per 1 cc. ampul, boxes of 3, 25.

Economy Sizes—

10 cc. vial—10,000 I.U. per cc.
20 cc. vial— 2,000 I.U. per cc.

AMNIOTIN PESSARIES—For Intra-vaginal Use

1,000 I.U. each, boxes of 12 (Children)
2,000 I.U. each, boxes of 6 and 50 (Adults)

AMNIOTIN CAPSULES—For Oral Administration

1,000 I.U. per capsule—
boxes of 20 and 100 capsules
2,000 I.U. per capsule—
boxes of 20 and 100 capsules
4,000 I.U. per capsule—
boxes of 20 and 100 capsules
10,000 I.U. per capsule—
boxes of 20 and 100 capsules

For literature write Professional Service Dept., E. R. Squibb & Sons, 745 Fifth Ave., N. Y.

Amniotin

A SQUIBB PREPARATION OF ESTROGENIC SUBSTANCES
OBTAINED FROM THE URINE OF PREGNANT MARES

ON REQUEST: SMOKING STUDIES

from completely reliable sources

Because it is good scientific practice to rely on work done by others, *provided the source of the investigation is recognized as competent and authoritative . . .* we shall be happy to send you, upon request, reprints of papers published* on the influence of hygroscopic agents on irritation from cigarette smoke.

PHILIP MORRIS

PHILIP MORRIS & CO. LTD., INC.

119 FIFTH AVENUE, N. Y.

* *Laryngoscope*, Feb. 1935, Vol. XLV, No. 2, 149-154 — *Laryngoscope*, Jan. 1937, Vol. XLVII, No. 1, 58-60 *Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241 — *N. Y. State Journ. Med.*, Vol. 35, 6-1-35, No. 11, 590-592

RACÉPHEDRINE HYDROCHLORIDE

(UPJOHN)



With the winter come colds and upper respiratory infections. To relieve the resulting nasal congestion, you will again need a reliable decongestant.

Racéphedrine Hydrochloride (Upjohn) is available as a 1% solution in Modified Ringer's Solution, in one ounce dropper bottles for prescription purposes, and in pint bottles for office use.



Fine Pharmaceuticals Since 1886



BIOLAC is complete and replete...

...because there is no lack in Biolac, except for vitamin C. Biolac feeding provides amply for all other nutritional requirements of the normal young infant, and no additional formula ingredients or supplements are necessary. It's an improved evaporated-type infant food with breast-like nutritional and digestional advantages. It is a complete formula, replete with nutritional values. Biolac is prepared from whole milk, skim milk, lactose, vitamin B₁, concentrates of vitamins A

and D from cod liver oil, and ferric citrate.

Why BIOLAC is an ideal infant formula food:

- Ample provision for high protein needs of early months
- Reduced fat level for greater ease in digestion
- Enriched with vitamins A, B₁, D and iron
- All needed carbohydrate in the form of Lactose
- Sterilized for formula safety
- Homogenized to improve digestibility
- Easy to prescribe
- Convenient for mothers to use
- Economical: nothing need be added

Prescribe Biolac in your next feeding case. Professional literature on request.
Write Borden's Prescription Products Division, 350 Madison Ave., New York, N. Y.

● VISIT OUR BOOTH NO. 36 AT THE PALM BEACH MEETING

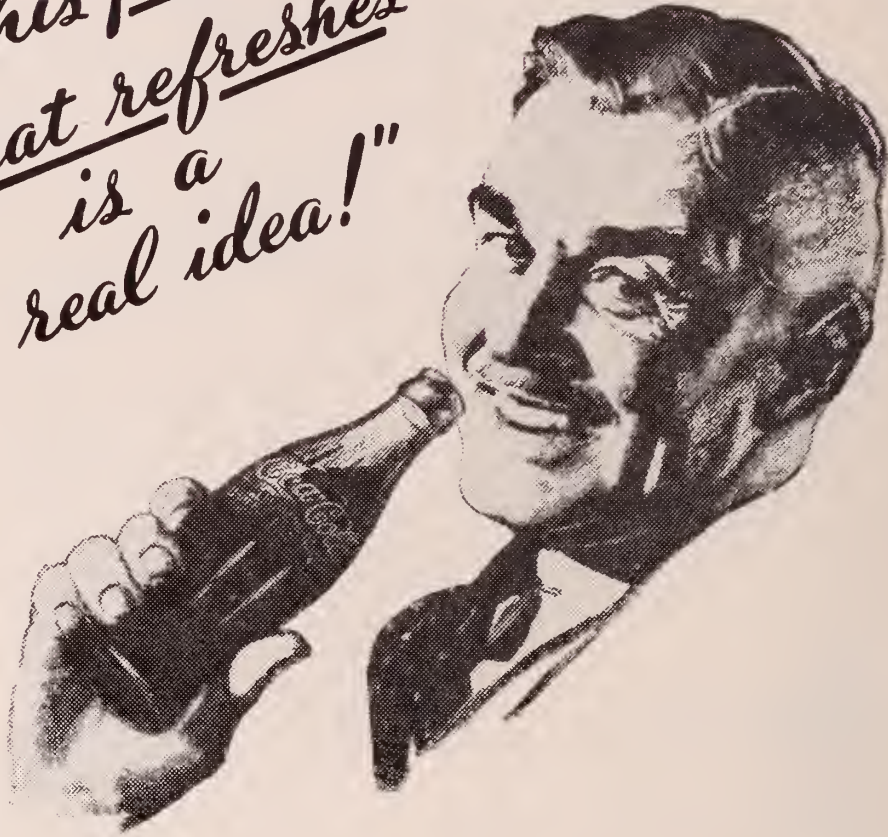


Borden's **BIOLAC**

A BORDEN PRESCRIPTION PRODUCT



*"This pause
that refreshes
is a
real idea!"*



Ice-cold Coca-Cola, — pure, wholesome and delicious, — has made *the pause that refreshes* America's favorite moment. Everybody welcomes the refreshed feeling,— the happy after-sense of complete refreshment Coca-Cola always brings.



THE PAUSE THAT REFRESHES

Don't quit smoking too fast

MODIFYING NICOTINE INTAKE

*NEED REQUIRE NO SACRIFICE
OF SMOKING PLEASURE OR ECONOMY*

EVERY physician knows the resistance of patients to any modification of smoking habits. Yet often it is desirable to reduce the intake of nicotine, the substance conceded to be the chief physiologic component of cigarette smoke.

Here it is suggested that the physician advise Camel, the slower-burning cigarette. Medical—research authorities* find, and Camel's scientific tests** indicate, that a slower-burning cigarette produces less nicotine in the smoke.

Comparative tests demonstrate that the smoke of Camel cigarettes contains 28% less nicotine than the average of the 4 other of the largest-selling brands tested—less than in the smoke of any of them.

In adjustments of smoking hygiene, the cooperation of your patients is important. Camel's blend of costlier tobaccos is noted for its mildness, coolness, and better flavor. Besides, Camel cigarettes are popularly priced.

A RECENT ARTICLE by a well-known physician in a national medical journal** presents new and important information on the subject of smoking, together with other data on the significance of the burning rate of cigarettes. There is a comprehensive bibliography. Let us send you a reprint of this article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

W.S.P.
* J.A.M.A., 93:1110, Oct. 12, 1929

Bruckner, *Die Biochemie des Tabaks*, 1936

** *The Military Surgeon*, Vol. 89, No. 1, p. 7, July, 1941

W.S.P.
CAMEL
THE CIGARETTE OF COSTLIER TOBACCOS

The art of doing things well



IN THE Lilly Laboratories not just any cat or frog that happens along is used in standardizing digitalis. Lilly accuracy demands careful selection and housing of test animals under standard conditions in order to avoid individual variations due to environment and nutrition. Frogs which are being prepared for digitalis testing are held in a constant temperature bath where a variation of no more than 0.1°C . is permitted. The results of testing are evaluated by competent workers, some with over twenty years of experience in digitalis standardization.

Lilly

Eli Lilly and Company

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U.S.A.

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XXVIII

Jacksonville, Florida, March, 1942

Number 9

THE PUBLIC HEALTH LABORATORY AND THE PRIVATE PRACTITIONER

J. N. PATTERSON, M.D.
JACKSONVILLE

No modern physician would attempt to practice medicine without the aid of a laboratory. A laboratory examination properly performed can be of great assistance to the physician in the diagnosis of a disease or in following the progress of a disease. On the other hand, a laboratory examination poorly performed is worse than no examination at all as it may be definitely misleading. Laboratory service must likewise be prompt to be of the greatest service to the physician. The laboratories of the State Board of Health strive at all times to give accurate, prompt and courteous service to the physicians of Florida.

Private practitioners have the right to expect that all specimens submitted to our laboratories will be given prompt and efficient examinations that insure reliable results. The staff endeavors at all times to give this service, and we are able to do so only because our workers put in much overtime. Examinations are started the day specimens are received, and reports go out that same evening except on those specimens that require more than one day for completion of the examination. All examinations of an emergency nature are started immediately. Occasionally, for one reason or another, we are not able to examine a specimen, but our workers are instructed to report to the physician that the specimen has been discarded, giving the reason. This requirement holds for hemolyzed, contaminated or broken specimens as well as for those discarded for any other reason.

There were times in the past when requests for specimen containers could not be filled immediately because of an insufficient number of workers in the assembling room. This situation has been remedied by the installation of a semi-automatic glassware washing machine, the use of which has freed part of the washroom force for duties connected with the assembling of specimen outfits. Occasionally now, however, sup-

plies cannot go out as fast as we should like since the requirements and priorities of defense projects at times prevent us from obtaining material with which to replenish or replace our stocks.

Within the last two and one-half years great changes in the physical equipment and in the quality and quantity of work performed have taken place in the laboratories of the State Board of Health. Much obsolete and worn out equipment has been replaced with modern equipment. Our laboratories are now well equipped from the standpoint of mechanical apparatus.

There has also been a great change in the personnel of the state laboratories. It has been gradual and has affected both the number and the educational qualifications of the persons employed. Realizing that the results of any laboratory procedure can be no better than the skill of the technician performing this work, we employ only capable and conscientious persons, who do their work under the strict supervision of a highly skilled person in charge of each particular division of the laboratory. For example, the assistant director has a Master of Science degree in bacteriology and a Doctor of Public Health degree in laboratory work from the University of Michigan. Our senior parasitologist, who has a Doctor of Philosophy degree, studied for several years with such well known authorities as Craig and Faust at Tulane University, one of the foremost schools of tropical medicine. The senior bacteriologist in charge of culture work has a Master of Science degree in bacteriology from Johns Hopkins University; coupled with her practical experience, this training assures prompt, accurate service on any problem in that field. Several of our junior bacteriologists and serologists also have Bachelor's and Master's degrees. Our senior serologist has a Bachelor of Arts degree and has studied in the laboratories of Drs. Kahn, Eagle and Kline as well as in the serologic research laboratory of the United States Marine Hospital, Staten Island, N. Y. In all, 70 per cent of our technical workers are college graduates.

The technics used in performing tests in our laboratories have undergone great changes in the last two years with corresponding improvement in the quality of the work. Some outdated

Assistant State Health Officer and Director of Laboratories, State Board of Health.

Read before the Sixty-Eighth Annual Meeting of the Florida Medical Association, held at Jacksonville, April 28, 29 and 30, 1941.

technics have been dropped, and newer and more efficient methods have been adopted. In spite of the fact that our laboratories are overloaded, we do not sacrifice accuracy for speed. Also, many new tests, helpful to physicians, have been added to our routine.

The quality of our work has been improved by permitting many of our workers to study for from two to six weeks in a laboratory noted for its research in a particular field. In the five years preceding 1938 only one laboratory worker had been given such an opportunity to study elsewhere. In the last two and a half years fourteen members of our staff have been given the opportunity for study in various laboratories throughout the country. The money used to pay the traveling expenses for these workers did not come from the state, but from the United States Public Health Service. Such postgraduate studies have inspired the workers with an enthusiasm which has resulted in a corresponding improvement in the quality of our procedures.

Seminars are held in the central and larger branch laboratories. Many hours of work by our staff go into the papers which are mimeographed and distributed to our branch laboratories, other State Board of Health laboratories, private and hospital laboratories, the United States Public Health Service, universities and physicians requesting them. Judging from the comments we have heard, these papers have been well received.

These changes could not have been brought about if the former state health officer, the late Dr. A. B. McCreary, the present state health officer, Dr. W. H. Pickett, and members of the Board, Dr. Shaler Richardson, Dr. Herbert E. Bryans, Mr. A. William Morrison and the late Dr. N. A. Baltzell, had not given their full cooperation. The director has had free rein in choosing the personnel of the technical staff, and all that is required of it is satisfactory performance of duties. The only checkmate on the choice of personnel and in the purchase of equipment has been a financial one. The state health officer and the Board have been most generous with funds for the laboratories, but they have been hindered by the limited budget of the entire State Board of Health. An increased appropriation for the laboratory would enable us to add to our routine several new tests of value to physicians. But to do so we need additional room since even now we are hampered by inade-

quate space. We are asking the present legislature for a new building and for an increase in the laboratory budget. We hope that our service has been sufficiently satisfactory to merit the support of the physicians of the state, through their legislators, in these matters.

No doubt some physicians still have their copy of the 1939 May-June issue of the Health Notes, which was devoted entirely to the work of the State Board of Health laboratories. This issue gave information in regard to the type of tests performed, specimen containers available, biologic products supplied, means of preventing hemolysis and laboratory aids in the diagnosis of specific diseases. This number of Health Notes has become somewhat obsolete because many new tests have been added to our armamentarium. It is hoped that by August it will be possible to bring this information up to date and to publish it in booklet form for physicians as an aid in laboratory problems.

Before discussing the particular tests performed in our laboratories I would like to impress upon the physicians who use our facilities that all our stains, antigens, culture mediums and animal experiments are adequately controlled. Stains such as Gram's, and acid-fast stains are checked daily; each lot of Kahn and Eagle antigen, even though approved by the author-serologist, is run against a negative and a positive serum as well as a salt solution control; each batch of culture medium is checked against known strains of bacteria; and all experiments on animals are adequately controlled. Much of the accuracy of our work depends upon the fact that each procedure has been carefully controlled.

Some of the new procedures used in our laboratories are presented here.

Serodiagnostic Tests for Syphilis: We perform a Kahn standard test and an Eagle flocculation test on every specimen of blood received for serodiagnosis. We are also prepared to perform Kahn quantitative tests on specimens of blood and spinal fluid giving positive reactions on qualitative examinations. In the central laboratory we receive between 800 and 1,800 specimens daily. Thus we actually run from 1,600 to 3,600 tests per day. In each of the larger branch laboratories, located at Miami and Tampa, between 200 and 500 specimens are received daily. Both the Kahn and the Eagle tests are carried out exactly as prescribed by their respective originators and by serologists trained in their laboratories. This

exactness, no doubt, has had much to do with the excellent showing, detailed below, which our central laboratory made in the 1940 evaluation study conducted by the United States Public Health Service.

KAHN STANDARD PRECIPITATION TEST

	Sensitivity	Specificity
Control	71.2	100.0
Florida	71.7	99.5

Figures for the 1941 evaluation, in which we entered both the Kahn and Eagle tests, are not complete. Preliminary statistical studies, however, show that we detected 3 per cent more cases of syphilis with the Kahn test than did Dr. Kahn's laboratory.

Dark Field Examination for *Treponema Pallidum*: This service has been available for the last year and a half and has been the means of enabling physicians to diagnose syphilis in the early stage in many cases before examination of the blood gave positive results. All of our laboratories are equipped to do this work.

Stool Examination for Intestinal Parasites: We have adopted a new technic for the examination of intestinal parasites. By this method we are able to recognize cysts of *Endameba histolytica*, *Endameba coli*, *Endolimax nana* and other parasites as well as the ova of the usually encountered helminths. If pinworms or seatworms are suspected, a request should be submitted for a National Institute of Health swab. If a worm is submitted for identification, please forward it to the laboratory in a bottle containing either 10 per cent formalin or 70 per cent alcohol.

Stool Examination for Intestinal Pathogens: This is a rather recent service, but it has already been extensively and profitably used. Separate specimen container outfits are furnished for the isolation of dysentery organisms and for the typhoid-paratyphoid group. We have greatly enhanced our chances of isolating these pathogenic organisms since using the newer selective mediums. The diagnostic antisera used in the final identification of these pathogens are produced in the central laboratory.

Agglutination Tests: Tests of this nature are performed as an aid in the diagnosis of typhoid, paratyphoid A and B, undulant fever (brucellosis), typhus fever and tularemia. We request at least 5 cc. of blood in a plain test tube. In our central laboratory, for the last six months, we have been culturing for typhoid organisms the blood clots of all specimens submitted for

agglutination. We are able to find these organisms in cases of typhoid fever long before the agglutination test gives positive results. By August we hope to inaugurate this procedure in all our branch laboratories.

Blood Cultures: There are now available at low cost special containers for the submission of blood cultures. A broth medium which will adequately support the growth of staphylococci, streptococci, pneumococci and the like has been placed in these outfits. In addition, we supply the same container with a 10 per cent carbon dioxide tension for use in suspected cases of brucellosis (undulant fever). In the near future we shall also make available at cost an evacuated blood-collecting tube of the Keidel or Kimble venule type.

Examination for Gonorrhea: Smears for gonococci are examined by the Gram stain in all our laboratories. In addition, all laboratories are equipped to culture these organisms on request. By the culture method many cases of gonorrhea have been diagnosed that otherwise would have been missed. This diagnostic measure is particularly effective in cases of the disease in women for at times it is difficult to obtain a positive smear in the subacute and chronic stages of the disease. Gonococcus culture work has little place in the acute stage and is of no value when specimens cannot be brought to the laboratory by messenger within two hours after collection.

Sputum Examination for Tuberculosis and Bronchial Spirochetosis: We now concentrate sputum specimens before examining them for tubercle bacilli. This procedure takes much more time and effort than the older method, but many more positive results are obtained. From concentrated sputum, animal inoculation and culture on artificial mediums can be carried out. In the central laboratory Petragnani's and Bordet-Gengou mediums are inoculated from each concentrate. We also stain our smears for tubercle bacilli from two to four hours instead of the much more rapid method of steaming the stain from five to seven minutes.

Blood and Urine Level Determinations for Sulfanilamide, Sulfapyridine and Sulfathiazole: Within the last six months we have instituted these procedures in all our laboratories. Blood for this determination should be submitted to the laboratory in oxalated tubes.

Spinal Fluid Examination: Our division of chemistry is now determining total protein con-

centrations in spinal fluid through use of the photoelectric colorimeter. This index is of value in following the therapy in a number of diseases, notably syphilis of the central nervous system.

Test for Infectious Mononucleosis: Arrangements have been made so that we have an always available source of sheep red blood cells to be used as the antigen for the Paul-Bunnell agglutination reaction, which is usually considered diagnostic for infectious mononucleosis (glandular fever). This is merely a courtesy service, since clinical laboratories cannot usually obtain the necessary sheep cells.

There are numerous ways in which private practitioners can be of great assistance to our laboratories. The result of a laboratory examination can only be as good as the care with which the specimen was prepared and submitted for examination. Each specimen should be carefully collected and mailed in its proper container. The data blanks should be filled in completely and legibly. Only by referring to this information can we know just what test is desired and to whom the report should be made. All specimens not labelled or not accompanied by data blanks are discarded. Only if the data blanks are filled in completely and legibly can our records be kept straight, for these blanks are filed as part of our permanent records. For this reason and also for the safety of our workers these blanks should be submitted in such a manner as to prevent their being soiled by the specimen.

A request for an examination not ordinarily performed in our laboratories, or for which special attention is desired, should be accompanied by, or, even better, preceded by a letter addressed to the director of the laboratory which gives all necessary information concerning the nature of the case and specimen submitted. Our work is limited to that of a public health nature as we have no desire to compete with clinical laboratories. Rather, we wish to aid them and so offer our services to them. Private clinical and hospital laboratories cannot afford to keep on hand the stocks of mediums, sugars and serums which we maintain for the identification of many bacteria. Also, we can assist their workers in the identification of animal parasites and in the solution of serologic problems. Our staff of highly skilled workers stands ready and anxious to aid them. We also invite them to come and study in our laboratories. Many of these workers have already availed themselves of this opportunity, and

many more have asked to be admitted for study this summer.

All requests for specimen containers or biological products should be sent directly to the Bacteriological Laboratory, not addressed merely to "State Board of Health" or to a bureau or division. In this way delays caused by unnecessary handling can be avoided, and there is no chance of the request being mislaid or lost while in transit to our department. Please do not send a request for specimen containers or biologic products along with specimens submitted for examination as it is apt to be overlooked.

We do our best to eliminate errors, but we realize that no process is entirely free from them. If you discover an apparent omission or error, please call it to our attention in order that we may restudy the case, investigate the method used or otherwise correct the source of the difficulty.

We workers of the State Board of Health are vitally interested in offering the finest services of which we are capable. I derive great satisfaction from the knowledge that we can put to work on the problems of the private practitioners some of the best trained personnel in the country. By submitting carefully collected specimens, which are accompanied by complete data the physician can materially simplify our tasks and assure himself of the quickest, most accurate laboratory service obtainable. Working together we can do much toward bettering the health of Florida to the mutual benefit of all concerned.

Box 210

DISCUSSION

DR. T. Z. CASON, Jacksonville: The essayist has clearly outlined a number of the functions of the State Board of Health laboratory. He has also discussed the question of the improvement in personnel. The statement made in the first paragraph of his paper can not be too often repeated nor too strongly emphasized, namely, that "a laboratory examination properly performed can be of great assistance to the physician in the diagnosis of a disease," but "a laboratory examination poorly performed is worse than no examination at all as it may be definitely misleading." For instance, only those of us who have practiced medicine in this state for a number of years can appreciate the difficulties we have had over incorrectly performed serologic tests, particularly those for syphilis.

Our chief difficulty in the last few years has been due not to the technic used nor the interpretation of the findings, but to the extreme delicacy of the reactions. Dr. Patterson has made every effort to explain, to those of us who have received questionable reports, the reason for such reports and has gone as far as modern laboratory science can in giving us a conclusive answer.

We should be particularly proud of the figures quoted in his paper showing the results of the Kahn tests at the central laboratory. It is to be hoped that each of us realizes the vast amount of work required in carrying

out the laboratory procedures which he has so carefully outlined. This report should not only stimulate our private laboratories to the highest type of work, but actually necessitate a careful examination of all the procedures in our private laboratories so that we too may say that we are keeping pace with our State Board of Health laboratory.

Each of us can be of great assistance by making an effort to secure adequate funds for the continuance of the high standard of efficiency of this laboratory.

DR. LESTER L. WHIDDON, Ft. Pierce: I should like to emphasize what Dr. Patterson has said about cooperation with the State Board of Health in trying to carry out the requirements in preparing specimens in the right way in order to get the best results. All of the physicians of the state should appreciate the aid of the State Board of Health laboratory because I do not see how any of us could survive without it. But there is one thing that I want to ask Dr. Patterson.

We are particular in my office to prepare specimens as well as can be done, and in preparing blood for Kahn or Wassermann examination we are particular to pack cotton down at the end of the tube and plenty of it at the top. Of course in the middle it does not make any difference. It seems to me that when I send blood on Friday or Saturday, I more frequently get reports back that it was either hemolyzed or broken in transit. I have wondered if at the last minute some of these specimens were not given the sink test. That is not a criticism. It is just something that one can not help but think of. Now, of course, in packing these tubes after receiving several reports to that effect, we have tried to damage them. We have thrown them against the floor. We have thrown them against the wall. We have given them much rougher treatment than they could possibly get in the mail, and we can not break them. So I am wondering. Probably there is nothing, absolutely nothing, to my impression, but I wonder.

DR. PATTERSON (*concluding*): I want to thank Dr. Cason for his discussion of my paper and for his highly complimentary remarks regarding our laboratories.

Dr. Whiddon's statement brings out a few points that should have been discussed in my paper, but were omitted for the sake of brevity. We find that when all instructions are followed as outlined in a form letter (Prevention of Hemolysis) sent out at intervals to physicians, little hemolysis occurs. We know that hemolysis occurs more frequently in specimens mailed on Friday or Saturday afternoon than in those mailed earlier in the week. To forestall its occurrence as much as possible, we send a man to the postoffice Saturday afternoons and Sundays to pick up specimens. The blood specimens are then kept in the refrigerator until Monday. Our laboratories are open on Saturday afternoons and Sunday mornings for emergency work.

When a tube containing blood is packed tightly and sent through the mail, there is more chance for its breakage than when it is more loosely packed. When cotton is used as packing one should be sure not to pack it firmly. We are now experimenting with a corrugated fiber packing which should decrease considerably the amount of breakage of tubes. Dr. Whiddon said he had been unable to break some of the tubes in containers by throwing them forcibly against the wall. The only explanation I can offer for the breakage of tubes in containers in the mail is that these tubes must be subjected to severe strain by rough handling and by heavy objects falling upon them in the mail bags.

Our workers examine every specimen submitted, or notify the physician if a specimen is not fit for examination. To the best of my knowledge, we perform no so-called sink tests. If any of our workers is ever found doing so, he or she shall be summarily dismissed.

I wish to thank you all for your kind attention.

UNRECOGNIZED IMPORTANCE OF MINOR INJURIES

LLOYD J. NETTO, M.D.
WEST PALM BEACH

That the importance of minor injuries has been neglected cannot be disputed. It is time now to correct this unfortunate situation if the medical profession is to survive and maintain the reputation for high standards it so richly deserves. During the stress of war or some major civil disaster, with rapidly mounting casualties and short-handed medical teams, there may be reason for treatment of the "paint it with iodine and mark him duty" variety. Such therapy, born of dire necessity under the trying circumstances of hurried preparation or actual combat, would be intended for the discard in more normal times. Nevertheless, in the hands of too many physicians such an attitude prevails today. This situation is not, I am sure, because of lack of training or knowledge; nor is it due to lack of interest in the patient on the part of any physician. The neglect is, however, due to a failure to appreciate the importance of an apparently trivial injury and the unlimited field of complications, sequelae and side reactions in every degree up to and including death itself. Needless to say, there is occasionally plenty of trouble ahead even when the so-called minor injury is treated competently with care and skill beyond which nothing could be desired.

From the patient's standpoint there is too much dependence placed in so-called home remedies for the treatment of many minor injuries that primarily are far beyond the reach of such ill applied first aid methods. Perhaps this phase can be attributed to newspaper medicine and exaggerated claims for many proprietaries or patent medicines. Suffice it to say that a large proportion of the population has come to depend on hot water and epsom salts, or similar fads, for the cure of a wide variety of minor wounds.

For good reason in the last year or two there has been more space in the literature devoted to the subject of minor surgery and minor surgical procedures, which is as it should be. Additional interest can only be manifest when in the large medical meetings of state and nation a reasonable part of the time on the programs is given to papers and discussions on this subject. At such

gatherings the greatest attendance figures are reached; therefore, the greatest amount of good can be accomplished. Yet their programs are top-heavy with new developments in technic, medication, instruments and diagnosis, all interesting and instructive; but they reach into the heart of the practice of a relatively small percentage of the total number of physicians present.

With the advent of another World War the importance of the proper care of minor injuries is being more clearly recognized. It is astounding to learn through the records of the draft boards of the poor health of the youth of the nation as based on Army standards. No doubt a considerable number of rejections for service could be traced to some minor injury in childhood or early adult life that was neglected by the patient or was treated indifferently by the physician, who failed to recognize fully its importance because of its seeming insignificance. Too often it happens that some unexpected complication sets in when it is too late to forestall septicemia, or to save a tendon, a nerve, or the function of a joint. There may be reason to justify an error in judgment when an honest effort is made to leave no stone unturned, but there is no excuse for carelessness and neglect in following recognized principles in diagnosis and treatment. Such principles are violated when thoroughness and care are sacrificed for speed and neglect.

The following quotations on the definition of minor surgery emphasize its importance:

Dr. Frederick Christopher in his textbook:

Minor surgery is surgery which has a low mortality, which requires but few assistants, which generally is done in the hospital outpatient department or in the office. It includes the large majority of surgical cases.¹

Dr. T. R. Ponton, Editor of Hospital Management: There can be no rigid definition of major or minor surgery. In fact, it is doubtful if the terms are not misnomers except from the financial point of view.¹

Dr. MacEachern in Medical Records in the Hospital listed the five points which classify an operation as minor, the first and most important being: The abnormal condition which indicated the operation is such that, in itself it constitutes no serious hazard to the life of the patient.¹

A wound is a break in the continuity of the skin, and, however small, may serve as the avenue of entrance for virulent organisms into the blood stream. Because of this possibility no effort is spared during elective surgery in the thorough preparation of the skin of the relatively clean abdomen, and elaborate preparation is taken

to sterilize instruments, drapes, gowns, gloves and the hands of the operating team before entrance is made into the peritoneal cavity or other body cavities. The entire operating personnel of hospitals is, or should be made, infection-conscious so that nothing that is contaminated may come in contact with the carefully made wound. Is there reason then that the same careful preparation should not be carried out in dealing with accidental wounds, all of which are contaminated by the instrument or object which caused them? More than 90 per cent of such wounds are potentially infected when first seen by the physician. This fact alone is sufficient reason for surgeons to carry at least a good share of this operating room consciousness into their work in the dispensary or private office.

To emphasize the need of recognizing the importance of minor injuries, it is necessary to name but a few examples that illustrate the serious hazards resulting from these trivial lesions, should something go wrong.

1. The famous Coolidge case in which a simple blister on the heel resulted in death.

2. The not uncommon incidence of death following removal of sebaceous cysts, all of which are potentially infected.

3. Paronychia infections of the fingers and toes, which frequently result in osteomyelitis in a phalanx.

4. Nail wounds resulting in infection leading to severe cellulitis of the foot, or tetanus because of inadequate drainage.

5. Puncture wounds of the fingers caused by thorns, fish bones and other small objects, leading to tenosynovitis and the like.

6. A superficial infection of the nose, which may terminate in meningitis or an abscess of the brain.

7. Squeezing of pimples about the face, resulting in infection.

8. Severe infections from wooden splinters, often pulled out by the patient, who neglects the injury except for touching the wound with some antiseptic.

What is the remedy? It is to treat the accidental wound in a manner suited to its importance in the light of possible consequences. This treatment is accomplished by using a reasonable amount of care in the preparation of the field with regard to cleanliness, and by following sound surgical principles in (1) diagnosis of the true

nature and exact extent of the wound, (2) debridement and removal of foreign materials and devitalized tissue, (3) establishment of drainage as indicated, which is most important in puncture wounds, (4) anatomic repair without tension or undue constriction of tissue and (5) rest of the injured part.

By the application of these simple but sound principles together with modern advances in technic and the discovery of new drugs for prevention and treatment of infections, notably the sulfonamides, the incidence of infection in accidental wounds can be materially reduced. A wound might better be closed in a clumsy manner, leaving an ugly scar, if it is done following thorough and painstaking care in preparation of the entire area, than to be repaired in the manner of a master surgeon with the dirt sewed in, if a choice is to be made between two evils. Infection is responsible for most of the calamities that follow upon wounds. It is due more times than not to a failure on the part of somebody somewhere along the line to recognize the importance of the minor injury, whether it is received in the home, in industry or on the highway, and to render treatment in keeping with that importance.

REFERENCE

1. Mazzola, Vincent P.: Editorial, Am. J. Surg. 50:447-449 (Dec.) 1940.

416 Comeau Bldg.



THE YESTERDAY OF MEDICINE

M. A. NICKLE, M. D.

CLEARWATER

Let us all climb aboard Professor Won-Mug's time machine for a lightning flight backward through the centuries to the time of Ally Oop or before, and make some observations as we more leisurely return.

Anthropologists estimate that man's existence on earth dates probably as far back as twenty thousand years, although it is authenticated for only eleven thousand years by diggings made in the region of the Nile. Then, and for a long time after, man was but a savage, by day roving the forests in search of food, by night huddling in some cave or thicket for rest and protection, always in fear of attack by wild animals and stronger men. When ill or injured, he crawled

into some hiding place to die or to be destroyed by enemies.

He differed little from the beasts about him except that he possessed the power of reasoning. He was ignorant, but intelligent. He early began to seek a reason for his plight and a way to solve his problems. Since animals moved and were alive, trees, too, moving in the breeze must be alive; they all, he reasoned, had spirits. The good spirits brought success and health, the bad spirits misfortune and disease. Some way must be found to appease or drive out the evil spirits and to encourage the good. Among the savage tribes there were those who seemed different from the rest because they were shrewder perhaps, maybe illshapen, a bit queer or not understood by the others; hence they were looked upon as possessing powers of control over the spirits. It was only natural that others should turn to them for help in their troubles and for the healing of their ills. They became the medicine men.

To primitive man all was mystery. The medicine man practiced healing by magic. Donning fantastic garbs and going through weird motions with incantations and shaking of rattles, he endeavored to appease or to dispel the evil spirit in his patient. His was a crude sort of psychotherapy which impressed the mind, and frequently that was all that was necessary. "Post hoc, ergo propter hoc" (after it, therefore because of it) was his frequently false conclusion. Since he was treated and recovered from his illness, he reasoned that he got well because of the treatment. This assumption was the basis of ancient medical practices and is the basis of the practice of many of the cults and fads of today. Modern medicine endeavors to weed out these false conclusions lest they be applied with disaster in really serious cases.

Later, herb remedies and concoctions made by boiling toads, insects and entrails of animals were employed, as well as objects of various sorts, used or worn as charms against disease or ill luck. At a still later period priests took over the work of the medicine man, and frequently treated patients at their churches, which became a sort of forerunner of the hospitals and clinics of today. Thus religion entered the field of medicine. The savage mind had not learned to differentiate between the terms priest and physician. Thus was medicine born in mystery and superstition, and treatment was by magic and charms and the invocation of the gods. It continued

so for thousands of years and still exists in that form among the uncivilized tribes of the world today.

Asia is considered the cradle of mankind, and China has perhaps the oldest medical history there, dating back some twenty-six centuries B. C. India had attained a high degree of efficiency in medicine long before Alexander the Great invaded that country in the fourth century B. C. The Indian physicians had a complete assortment of surgical instruments and were able to perform the most delicate operations with remarkable success. From the Veda, the Holy Book of India written some 3,300 years ago, there is proof that the ancient Hindus had a profound medical knowledge and were highly skilled and advanced surgeons. Chapters from the Veda read like any modern textbook on surgery.

Excepting Crete where the Minoans, a highly cultured people and the oldest in the Mediterranean area, lived, Egypt is perhaps the seat of all ancient medicine. From her the Greeks are said to have obtained their medical knowledge and medical god. The Ebers Papyrus reflects how the Egyptians taught and practiced medicine as far back as 3400 B. C. The prescriptions recorded therein indicate the extent of their knowledge of the use of drugs at that time. The records of this Papyrus were compiled in 1552 B. C., which was about the time Abraham, at Jehovah's command, started out to found a new nation. It was already ancient when Moses was a boy. It belongs to a period 500 years before Homer wrote his great epics and a thousand years before Buddha, Confucius and Hippocrates were born. It is evidently the result of its compiler's effort to gather together in one volume all the known records and prescriptions of the earliest Egyptian times. One prescription is for a king who reigned in 3400 B. C.

Even on our side of the world, 4,000 years before the first Christmas, the Indians of Mexico and South America were well skilled, especially in surgery. Diggings into ancient mounds give proof in the form of healed trephined areas in skulls, well united fractures of bone and the type of instruments found. In some of the tribes the chief physician and surgeon was given a "diploma." It was not a sheepskin, because the Indians did not have sheep until the white man brought them to America. The diploma was made of volcanic glass, called obsidian. The

larger the obsidian blade the greater the physician's reputation as a surgeon.

In earliest days when a case of illness resisted the magic of the medicine man, the patient was taken to the public market place. Passers-by were asked if they had ever seen a similar case or could suggest a remedy. The market place is now a thing of the past. Instead, we have the green benches. The regular teaching of medicine began early in human history. Systematic instruction of young physicians is reported in Mesopotamia as early as 3000 B. C. In Uruk there were state schools of medicine.

The ancient Greeks acclaimed Apollo as the god of healing, and his son Aesculapius as the god of medicine 1,000 years B. C. Homer¹ referred to the latter as a real personage, a Thessalonian chieftain and hero, divinely skilled in medicine. His two sons, to whom he had taught his art, accompanied the Greek host against Troy as physicians and surgeons.

While Aesculapius was the pioneer in Homeric medicine, it was Hippocrates who separated medicine from priestcraft and philosophy, reduced the irregular records of past systems to systematic science and clinical notation, and gave to all future physicians the highest moral inspiration. In the dim past medicine, shrouded in mythological mystery, was all magic and art. Hippocrates injected science into it. We know that neither science nor art is sufficient in itself. It is the masterful blending of scientific knowledge with just the right amount of art that makes the well balanced, and usually successful, practitioner.

Hippocrates was born in 460 B. C. at Cos, where a medical school was established. His mother, Phaenareté, who was a midwife, is said to have been the eighteenth in descent from Hercules. He came of a long line of priest-physicians and naturally became one himself. His investigative mind led him to observe closely the progress of illness and to note that patients with similar illnesses exhibited similar symptoms. Thus, knowing the ordinary course of the disease, he could predict the stages to follow and be prepared to treat them. Today his observations seem elementary, but up to that time physicians had been mere blundering machines, knowing little if anything about the workings of the heart, the lungs and the muscles, and having little knowledge of the human system in general. To them, one day's illness was never linked with that of the next. Hippocrates changed their con-

cepts and made them observant, thinking, skilled physicians, thereby laying a firm foundation in medicine for the generations that were to follow. One proof of the keenness of his observations is found in his detailed description of the preterminal facial expression now called the Hippocratic facies. He found that the course of certain diseases may be traced by listening to the sounds in a patient's chest. Yet it took 2,000 years for that knowledge to become useful by the invention of the stethoscope by Laennec. Realizing that the tendency of the body is to recover, he believed in waiting on nature, ineanwhile laying stress on regimen and nursing.

Unfortunately men did not long follow these teachings of Hippocrates, but drifted instead into mystery and folly. It took a Galen, born nearly 500 years later at the beginning of the Christian era, to establish medicine again on a sound basis. He sensed the importance of putting together all the safest teachings of his predecessors. These, together with the results of his own observations, though in the light of present day knowledge far from complete and by no means free from fallacies, exhibited wonderfully sound deductions, and until the sixteenth century A. D. the teachings of Galen were the guiding force in the science of curing disease. He recognized tuberculosis and observed that fresh air and good food were the best treatment. He described over four hundred drugs and their uses, and was the first to make cold cream.

To understand men and events properly, one must consider them in the light of their environment. This is the environment in which Galen found himself. Brilliantly educated, after attending most of the schools and seats of learning of his day, he early recognized the illogicalness of the medical teachings of that period. The profession was split into a number of schools, none of which came up to the standards of his profoundly logical mind. His life became a battle for scientific truth, based not on preconceived principles, but on dissection and experiment. He chose Rome, a city then with a population of about a million, in which to practice along the lines he was convinced were correct. It took tremendous courage and unwavering faith in his methods to make that decision, since he was the only one of the now so-called regulars among some two thousand physicians divided into about a dozen sects or cults. Each cult differed from the others in its premises, but the conclusions of

all were fallacious. In his student days at Alexandria, Galen had met the head of one of these cults, Julian by name. He was both ignorant and arrogant, and ever dared to criticize the Aphorisms of Hippocrates. Later Galen, in a book he wrote expressing his views on the various cults, exhausted the derogatory adjectives of the Greek language on the man who, without education himself, dared to criticize the Father of Medicine.

Comparing the number of practitioners then in Rome with the number in a city of a million people today, Walsh² found there would be approximately as many, namely two thousand. Of these, however, over fifteen hundred now are regulars; the others are divided among eight different branches of healing. What would the present day physician have done? Would he have braved the tide of such overwhelming opposition as Galen did and won, or would he have weakened in the face of such tremendous odds? The profession today is grateful for the courage of Galen.

The influence of Aristotle in the fourth century B. C. in determining the direction of medical thought extended for over two thousand years. He held that there are four primary and opposite fundamental qualities, the hot and the cold, the wet and the dry, that unite in binary combination to constitute the four elements, earth, air, fire and water, which enter in varying proportions into the constitution of all matter. Thus water is wet and cold, fire hot and dry, he reasoned. From this theory, which was later combined with the theories of Hippocrates, there resulted the so-called humoral pathology, which still has its analogues in modern medicine.

The Latin-speaking peoples produced no eminent physician, but Rome had a highly developed system of sanitation from a very early date. Some of the subterranean sewers built in the sixth century B. C. are still in use. Many of the great aqueducts built by Caesar to supply the city of Rome with water are also still being used. They are pointed out to tourists as monuments to the efficiency of the engineers and builders of ancient times. No modern city is better equipped.

Imhotep was deified by the Egyptians. He got his start when an Egyptian queen appointed him court physician in 4000 B. C. He wrote medical books and health instructions for the people. The Egyptian government recently is-

sued a postage stamp honoring him. Tradition tells us that three or four centuries before his time King Teti of Memphis had dissected human as well as animal bodies and had written a book on anatomy.

Little is said in most historical works about women physicians. It remained for Dr. Kate Campbell Hurd-Mead³ to discover that women were practicing medicine successfully back in the days of ancient Egypt, Greece and Rome. Today they are still doing so. In Egypt, queens were always students of medicine. From Queen Mentuhetep (2300 B.C.) down to bewitching Cleopatra in the last century before Christ there were always women physicians and nurses. The Egyptian women were allowed equal opportunities with the men to study what they pleased and where. They studied anatomy and the art of mummifying bodies. They were the gynecologists, obstetricians and pediatricists of ancient days. We are told that women surgeons were especially skilled with stone knives; they performed cesarean section, removed cancerous breasts, did circumcisions and many other operations. They were also expert in the use of splints for setting broken bones. A papyrus dated 2500 B. C. deals mostly with gynecology. It tells that certain women specialists diagnosed pregnancy and gave a prognosis of the sex of the unborn child based on the color of the pregnant woman's face; if it were green the baby would be a boy. Women played an important role in Hebrew medicine also.

Queen Cleopatra of the first century B. C. studied medicine and knew much about drugs, especially anesthetics and poisons. It is said she experimented with them on prisoners condemned to death, to observe their effects. Her choosing of the asp to end her own colorful career may be further evidence of her knowledge of these things. At the time this charmer of princes and captivator of kings was cavorting with her admirers in her limousines of the Nile, medicine was in that interval between Hippocrates and Galen, when sects and cults controlled the field. One cannot help wondering how she kept her youthful beauty and schoolgirl complexion, and history would indicate that she did, without the aid of those products the present day advertisers tell us are so essential. We do know, however, that women, centuries before then, were skilled in the use of perfumes and cosmetics, and had no lack of variety from which to choose.

Much about Hebrew medicine may be learned from the Bible and other Jewish writings. Palestine was a comparatively healthy country in Biblical days. Its lack of harbors prevented to a great extent the importation of epidemics. In Egypt with its many seaports disease and pestilence were prevalent. The medical knowledge of the peoples of the Bible was greatly deficient. There is no reference to medical education in Palestine. There probably were some Jewish physicians of a sort, who may have attended the schools in Egypt. Joseph was embalmed in Egypt as stated in Genesis.⁴ Jeremiah cried, "Is there no balm in Gilead; is there no physician there?"⁵ "Ye are all physicians of no value,"⁶ said Job in his affliction! There is a somewhat modern touch in the account given by Mark⁷ of one who "had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse." This woman is also referred to by Luke.⁸ Since Luke was himself a physician, one fancies seeing a blush on his face as he thus acknowledged the inadequacies of his profession.⁴

The Hebrews excelled, however, in matters of sanitation and prevention, and are said to have been the first real founders of public health. They were also the originators of medical jurisprudence.

The fact that widwives and pediatricians are so often mentioned in the Old Testament accounts of this sturdy ancient people, may well be because the Jews were enjoined to "be fruitful and multiply."⁹ References are made to prenatal life¹⁰ and the care of infants.¹¹ In Genesis are given details of the birth of Esau and Jacob,¹² and of the death of Rachel when Benjamin was born.¹³

Many references are made in the Bible to various diseases similar to those of today. Job was afflicted with boils, and the sores of the beggar named Lazarus were in all probability varicose ulcers. When Isaac grew old his eyes became dim, from cataract no doubt. Hemorrhoids, epilepsy, dropsy, all were common in Jerusalem. A case of dropsy was the subject of a miraculous healing by Jesus.¹⁴

Of interest is an incident linked with the introduction of chloroform in obstetrics by Sir James Simpson. When he employed it to ease the pain of childbirth, his critics claimed it was contrary to God's law, which says, "In sorrow

thou shalt bring forth children."¹⁵ He had but to remind those objectors that when Eve was born, "The Lord God caused a deep sleep to fall upon Adam."¹⁶ That reference seemed definitely to settle the question. Incidentally, at the time of Dr. Simpson's death at a largely attended meeting held in Washington the following expression of the feelings of his profession in the United States was made:

In Dr. Simpson American physicians recognize not merely an eminent and learned Scot's practitioner, but a philanthropist whose love encircled the world; a discoverer who sought and found for suffering humanity in its sorest need a foretaste of the peace of heaven; and a devoted disciple of the only true physician, our Saviour Jesus Christ.

The Hebrew midwives were not only proficient in their work, but sufficiently intelligent and quick-witted not to allow those in high places to use them to further their unworthy purposes. When they were ordered by Pharaoh to kill all male babies at the moment of their birth, they got around the command by answering that the Hebrew women were not like the Egyptian women, but were so quick in labor that the midwife had no opportunity to carry out the order for their children were born "ere the midwives come in unto them."¹⁷ Since the Hebrews believed that sickness was an expression of the wrath of God, to be removed by moral reform, prayers and sacrifice, it was only natural that they looked more to priests and prophets than to physicians for deliverance. For this same reason they sought the divine touch of Jesus, believing him to be a high priest direct from God. When such appeals were made in good faith, the Great Physician healed the suplicants. Sometimes he used material aids, as when he applied moistened clay to the eyes of the man who was blind, and told him to go wash in the pool of Siloam; he obeyed and came seeing. To the man sick with the palsy he said, "Arise, and take up thy bed, and walk,"¹⁸ and the man arose and went to his house.

He healed another with a withered hand. Tradition has it that the sufferer was a stonemason, maimed by an accident, and that he had implored the Galilean Physician to heal him so that he might not have to beg his bread. Cynical critics, who shared the common belief that all illness is caused by demons taking possession of the human body, proclaimed concerning this Doctor, "He hath Beelzebub, and by the prince of the devils casteth he out devils." It was in

answering this abusive piece of invective that the strange Man of Galilee posed to his traducers one of the most unanswerable of all questions, "How can Satan cast out Satan?"¹⁹

Moses and his wife Zipporah both studied at the coeducational school at old Heliopolis near modern Cairo. It is possible he may have studied some medicine. At any rate he acquired a thorough knowledge of sanitation and the hygiene of camp life. It is logical that his special training should have caused him to be singled out as one well fitted to lead the children of Israel out of Egyptian bondage. In addition, his wife was a trained midwife, who could be of valuable assistance in such an undertaking. It is said that if the excellent laws for health which Moses drew up fourteen centuries before Jesus was born, could be enforced today in the cities and in all the lands over which the Stars and Stripes fly, they would save thousands and thousands of lives every year.

We are eternally indebted to the pioneers in medicine who laid a sound foundation for our present magnificent structure. Since the philosophies of one age have become the absurdities of the next, and the foolishness of yesterday has become the wisdom of tomorrow, no one would dare to predict what people a thousand or more years hence may think of our twentieth century enlightenment.

REFERENCES

For much of the data used I am indebted to The Encyclopedia Britannica, the Book of Knowledge and The Bible.

1. Homer: The Iliad.
2. Walsh, J.: Galen Clashes with the Medical Sects at Rome, *Med. Life Mag.*, Sept. 1928.
3. Hurd-Mead, K.C.: A History of Women in Medicine, Haddam, Conn.: Haddam Press, 1938.
4. The Bible—Genesis 50:26
5. " " Jeremiah 8:22
6. " " Job 13:4
7. " " Mark 5:26
8. " " Luke 8:43
9. " " Genesis 9:1, 35:11
10. " " Psalms 139:13-17.
11. " " Ezekiel 16:3-4
12. " " Genesis 25:19-26
13. " " Genesis 35:17-18
14. " " Luke 14:2-4
15. " " Genesis 3:16
16. " " Genesis 2:21
17. " " Exodus 1:19-20
18. " " Mark 2:9-12
19. " " Mark 3:22-23



Typical vista in America's tropics. Palms on the Palm Beach shore of Lake Worth frame the skyline of West Palm Beach. Yachts ride at anchor adjacent to the intracoastal waterway channel.

Palm Beach - The Convention City

The Palm Beaches are the all year resort on Florida's tropical East Coast, where gather world-famous sunseekers from every state in the Union and from most of the countries of the world. Here is a sunny, healthful, year-round playground, where the climate is invigorating in winter and amazingly cool in summer for the reason that the Gulf Stream nearly touches the shore at this point and the southeast trade winds provide a kindly climate both in winter and summer.

In character, Palm Beach and West Palm Beach are two entirely different cities, separated by the elongated waters of beautiful Lake Worth, the former situated on the ocean and the latter on the lake. Palm Beach is the most fashionable resort in Florida, primarily a winter retreat noted the world over for its sumptuous estates, luxuriant vegetation, exclusive clubs and social life. West Palm Beach is an entirely democratic resort and an important commercial and agricultural center.

Public parks form an important part of the picture in the Palm Beaches, where natural beauty

is a community ideal and tropical landscaping has been brought to a high stage of development. Thirty thousand full grown palms have been planted in the parks and for miles along the city parkways.

Agriculture during the last ten years has made great strides in Palm Beach County, and today more than a pound of vegetables for each person in the United States is shipped from this county each winter. In the coastal ridge or Everglades muck lands, farming opportunities are numerous. Tremendous projects for water-control, such as the \$17,000,000 dyke at Lake Okeechobee, enable crops to mature within six weeks. Clewiston Mill, surrounded by hundreds of thousands of acres of cane, is a focal point in Florida's sugar industry.

The Convention headquarters will be at the Palm Beach Biltmore Hotel in Palm Beach, located on North Lake Trail overlooking Lake Worth, just two blocks north of Flagler bridge. Just a short distance from this hotel is the famous

sailfish sector of the Gulf Stream, the world's most productive big-game fishing ground. Here thousands of anglers gather in January for the Annual Silver Sailfish Derby. In addition to an annual average of 2,500 sailfish, many other game battlers are caught. All fishing is not confined to the Gulf Stream, however, as many anglers prefer piers, bridges, docks, jetties and small boats on Lake Worth. As a part of the intracoastal waterway from Maine to southern Florida, Lake Worth is the scene of great activity throughout the year, providing a safe harbor for yachts and tiny sailboats alike.

Florida's greatest golfers and tennis players are offered the use of several of the State's best courses and courts, including the famed Palm Beach Country Club, now operated by the Palm Beach Biltmore Hotel for its patrons. The noted Sun and Surf Club, located on the silvery-white beach of the blue Atlantic, is also owned and operated by the Biltmore for the convenience of its guests.

ATTENTION GOLFERS!

There will be a one-day, special, pre-convention golf tournament, Sunday, April 12, 1942, at Palm Beach. Come early and have a round of golf before the regular convention tournament. Prizes awarded, as well as nineteenth hole entertainment. Further information will be furnished upon request by Dr. J. R. Sory, Harvey Building, West Palm Beach.

YOUR ATTENDANCE URGED

The officers and members of the Palm Beach County Medical Society are working diligently to see that the members and guests who attend the annual convention will be royally entertained. The Biltmore is a spacious hotel, situated in the heart of the subtropics. Everything possible has been arranged for the comfort and pleasure of those in attendance.

A splendid scientific program will be presented, and other attractions arranged for, such as golf, fishing, skeetshooting, a smoker, the Association dinner, luncheons and sight-seeing. Every member of our Association who can possibly afford the time should avail himself of this opportunity for education and recreation as a break in the heavy routine demanded of every practicing physician.

Specialty groups will meet Sunday evening and Monday forenoon. The first general session, scheduled for 1:30 p.m., Monday, will be followed by the first meeting of the House of Delegates at 3 p.m., and a scientific session at 7:30 p.m. The annual smoker, to which the ladies have been invited, will be held Monday evening at 9 o'clock; it is termed "Palm Beach Nights."

The guest speaker for Tuesday will be Dr. Daniel C. Elkin of Atlanta, Professor of Surgery, Joseph P. Whitehead Foundation, Emory University. The program which appears on the following pages gives in detail the time and place of the various sessions and other important activities.



CONVENTION

HEADQUARTERS

Palm Beach Biltmore

on beautiful

Lake Worth

Palm Beach, Fla.

PROGRAM

of the

Sixty - Ninth Annual Meeting

of the

FLORIDA MEDICAL ASSOCIATION, Inc.

To Be Held at PALM BEACH, FLORIDA

APRIL 13, 14, and 15, 1942

REGISTRATION

The registration desk will be located in the north end of the technical exhibit hall of the Palm Beach Biltmore Hotel, with continuous service throughout the meeting. All members will be required to register and secure identification badges before attending any of the sessions. Guests and ladies are required to register.

HOTELS

PALM BEACH BILTMORE — *Convention Headquarters* (American Plan)

	Single — \$8.00	Double — \$7.00
Other Hotels (European Plan)	Single	Double
George Washington.....	\$2.50	\$4.00
Royal Worth.....	4.00	7.00
Dixie Court.....	2.00	3.50
Palm Beach Plaza.....	2.50	3.00
Mayflower.....	4.00	6.00
Palm Beach.....	4.00	6.00

TECHNICAL EXHIBITS

Technical exhibits will be located in the main lounge of the Palm Beach Biltmore Hotel. The technical exhibits have a real scientific value, and physicians who wish to keep abreast of the times and be familiar with the latest development in drugs and medical appliances should spend some time with these exhibits; a surprising amount of useful information can be procured in this way. Many exhibitors have nothing to sell, the representatives of the firms being there to give the latest information regarding their products. Those who have items for sale will gladly give information whether there is a purchase or not. Be sure to register your name with the various representatives who are exhibiting.

The following firms have arranged for exhibits at the Palm Beach meeting:

A. S. Aloe Company
American Hospital Supply Corporation
American Optical Company
Bard-Parker Company, Inc.
The Borden Company
Camel Cigarettes
Cameron Surgical Specialty Company
S. H. Camp & Company
DePuy Manufacturing Company
Endo Products, Inc.
Everhart Surgical Supply Company
C. B. Fleet Company
The Foregger Company, Inc.
General Electric X-Ray Corporation
Holland-Rantos Company, Inc.
Jones Metabolism Equipment Company
Keleket X-Ray Company of Florida

Lederle Laboratories, Inc.
Eli Lilly and Company
J. B. Lippincott Company
Mead Johnson & Company
William S. Merrell Company
C. V. Mosby Company
M & R Dietetic Laboratories, Inc.
Parke, Davis & Company
Pet Milk Sales Corporation
Petrogalar Laboratories, Inc.
Philip Morris & Company
Picker X-Ray Corporation
Sharp & Dohme, Inc.
Smith, Kline & French Laboratories
The Southeastern Optical Company
E. R. Squibb & Sons
Standard X-Ray Sales Company
Surgical Supply Company
TableRock Laboratories
Westinghouse X-Ray Division
John Wyeth & Brother, Inc.

SCIENTIFIC EXHIBITS

The scientific exhibits will be located in the Palm Beach Biltmore Hotel. We consider ourselves fortunate to be able to present for your approval the following exhibits:

1. American Medical Association: The Use and Abuse of Barbiturates; Health Education in the Doctor's Office.
2. Bureau of Professional Relations, School of Pharmacy, University of Florida, Gainesville.
3. Equitable Life Assurance Society, New York: The Clinical Evaluation of Heart Size Measurements.

FISHING TRIPS

Due to uncontrollable circumstances connected with the war, the exact details on fishing trips during the convention are not available. Opportunity will be afforded those attending the meeting to enjoy deep sea fishing in this famous sailfish center. Full information on this sport may be obtained at the information desk or from Dr. William M. Blair, chairman of the Anglers' Committee, 424 Comeau Building, West Palm Beach.

GOLF

The annual handicap golf tournament for members of the Florida Medical Association will be played at the Palm Beach Country Club. The tournament will be held Monday and Tuesday, April 13 and 14. The club will be available to members of the Association for practice rounds on Sunday, April 12. Those wishing to participate must be registered and show F. M. A. badges. (Greens fees reasonable).

Rules: U. S. Golf Association. See card for local rules.

Handicaps: Three-fourths official handicap with a maximum of 27 strokes. The entrant must register with the starter and give his handicap before beginning his tournament round.

Score card must be dated, signed, attested and turned in to the starter at the end of the round.

First prize: Orlando Cup (low net score). Many other prizes will be awarded.

For additional information, communicate with Dr. J. R. Sory, chairman of the Committee on Golf, 616 Harvey Building, West Palm Beach.

SKEET AND TRAPSHOOTING

Skeet and trapshooting events will take place Monday at 3 p. m. at the Palm Beach Gun Club (located just off Southern Boulevard). Two skeet fields and one field for trapshooting will be available. Guns will be furnished. Ammunition and targets may be secured at regular prices. It is desired to have a fifty-bird program in each event, which will be shot on a handicap basis. Qualifications or handicaps should be submitted from your local club secretary. All applications to participate in this sport should be made to Dr. V. M. Johnson, chairman of the Trapshooters' Committee, Box 671, West Palm Beach.

SMOKER — "PALM BEACH NIGHTS"

Monday, 9:00 p. m.

GRILLE ROOM
(Ladies invited)

Admission by F. M. A. Badge Only

ASSOCIATION DINNER

Tuesday, 7:30 p. m.

MAIN DINING ROOM

Dinner tickets (\$3.00 — Hotel guests exempt) may be obtained at the registration desk

AWARDING OF PRIZES

Tuesday, 9:30 p. m.

Golf, Fishing, Skeet and Trapshooting

DANCE

Tuesday, 10:00 p. m.

MAIN DINING ROOM

ALUMNI AND FRATERNITY LUNCHEONS

Luncheons for these groups will be held in the main dining room, Tuesday noon. For further details, inquire at the information desk and make all seating arrangements with Dr. O. B. Hazen, chairman of the Committee on Alumni and Fraternity Luncheons, Comeau Building, West Palm Beach.

OFFICERS OF PALM BEACH COUNTY MEDICAL SOCIETY

JAMES R. SORY, *President*

WILLIAM H. WEEMS, *Vice-President*

DAVID W. MARTIN, *Secretary*

FREDERICK K. HERPEL, *Treasurer*

LOCAL COMMITTEES

CABINET

Lloyd J. Netto, *Chairman*

James R. Sory	William M. Blair
Harry A. Wakefield	V. M. Johnson
Roy O. Cooley	Frederick K. Herpel
Gaylord Lewis	W. E. Van Landingham
Guy W. Heath	O. B. Hazen
George M. Dawson	William E. Bippus
Vale D. Stone	

REGISTRATION

Harry A. Wakefield, *Chairman*
Alva L. Rowe Hobart E. Warren
W. J. White

HOTELS

Roy O. Cooley, *Chairman*
Victor Clarholm Harry Moses
Nat M. Weems

LANTERN-AMPLIFIER

Gaylord Lewis, *Chairman*
Kenneth M. Davis Graham W. King
David W. Martin

ASSOCIATION DINNER

Guy W. Heath, *Chairman*
B. B. Sory, Jr. William H. Weems

SMOKER

George M. Dawson, *Chairman*
William Y. Sayad William B. Wilkins

GOLF

James R. Sory, *Chairman*
S. Ward Fleming S. Richard Ombres
J. C. Nowling C. W. Shackelford

ANGLERS'

William M. Blair, *Chairman*
Kenneth Montgomery Michael Smith
O. F. Schiffli J. Dillard Workman

TRAPSHOOTERS'

V. M. Johnson, *Chairman*
Charles E. Creel J. A. Newnham
Norman E. Ditman Grace E. Papot

FINANCE

Frederick K. Herpel, *Chairman*
Grady H. Brantley Gordon F. Henry
George E. Cram Wilburn C. Young

GREETERS

W. E. Van Landingham, *Chairman*
W. O. Arnold J. H. Pittman
Ellis B. Gray J. A. Powell
William C. Williams

ALUMNI AND FRATERNITY LUNCHEONS

O. B. Hazen, *Chairman*
R. Henry Baldwin William J. Buck
Richard S. Gill

TRANSPORTATION

William E. Bippus, *Chairman*
Thomas E. Daly Edgar W. Stephens
Michael Smith Frank S. Whitman

LADIES' ADVISORY

Vale D. Stone, *Chairman*
James L. Carlisle Alice R. Miller
William H. Gardner James R. Nieder
Lauchlin M. Rozier

MONDAY

FIRST GENERAL SESSION

Monday, 1:30 p. m.

BALLROOM

Call to Order, President Walter C. Jones

Invocation, Reverend Claude M. Haynes

Address of Welcome, James R. Sory, President, Palm Beach County Medical Society

President's Address, Walter C. Jones, Miami

Report of Secretary-Treasurer-Editor, Shaler Richardson, and Managing Director, Stewart Thompson

Introduction, Delegates from other state societies:

Mark S. Dougherty, Jr., Atlanta, Ga.

W. F. Reavis, Waycross, Ga.

Harold P. McDonald, Atlanta, Ga.

New Business

Announcements

FIRST MEETING OF HOUSE OF DELEGATES

Monday, 3:00 p. m.

PARLOR A, MEZZANINE FLOOR

President Jones in the Chair

Roll Call and seating of delegates

Adoption of minutes as published in June, 1941 Journal

Recognition of delegates to A. M. A.: Edward Jelks and Meredith Mallory (*Official report read at meeting of Executive Committee*)

Election of one delegate and one alternate to A. M. A. meeting for two-year terms

*(A. M. A. By-Laws, Chapter I, Sec. 1: "A member of the House of Delegates must have been a member of the American Medical Association and a Fellow of the Scientific Assembly for at least two years next preceding the session of the House of Delegates at which he is to serve.")*Reference Committee Personnel announced by President
Reading of ResolutionsMeeting Place, 1943 (*Recommendation of Executive Committee*)

Reports of Committees:

(Two copies of each report to be laid on speaker's table immediately after reading)

Executive, Louie M. Limbaugh

Scientific Work, Herbert E. White

Publication, George D. Lilly

Legislation and Public Policy, H. D. Van Schaick

Medical Education and Hospitals, J. S. Helms, Jr.

Public Relations, J. Ralston Wells

Necrology, Hubert A. Barge

Medical Postgraduate Course, T. Z. Cason

Cancer Control, Alfred G. Levin

Medical Economics, Harrison A. Walker

Venereal Disease Control, E. T. Sellers

Interrelationship, Henry J. Peavy

Tuberculosis and Public Health, M. Jay Flipse

State Controlled Med. Institutions, R. D. Thompson

Maternal Welfare, Lauchlin M. Rozier

Child Health, Warren W. Quillian

Advisory to Woman's Auxiliary, Gordon H. Ira

Council, W. Duncan Owens

Representatives to Industrial Council, J. C. Davis

Board of Past Presidents, William E. Ross

Medical Preparedness, Edward Jelks

New Business

Announcements

Adjournment

REFERENCE COMMITTEES

All reference committees will meet at 8 p. m., Monday, April 13. If additional meetings are required, announcement will be made by the committee chairmen. All meetings of each reference committee will be held in the rooms designated. The names of delegates to be appointed by President Walter C. Jones will appear in your printed program at the convention.

SCIENTIFIC ASSEMBLIES

Committee on Scientific Work: Herbert E. White, chairman, St. Augustine; Leland F. Carlton, Tampa; Charles J. Collins, Orlando; Robert B. Harkness, Lake City; Homer L. Pearson, Miami; James H. Pound, Tallahassee.

Attention is called to the following By-Laws:

"All papers read before the Association shall be its property. Every paper shall be deposited with the secretary when read."

"No address or paper before the Association, except those of the president and orator, shall occupy more than fifteen minutes in its delivery, and no member shall speak longer than five minutes, or more than once on any one subject."

PROJECTORS

The Committee on Lantern-Amplifier, of which Dr. Gaylord Lewis is chairman, has arranged for a projecting lantern and daylight screen for use during the convention. An operator will be available at all times.

FIRST SCIENTIFIC ASSEMBLY

Monday, 7:00 to 8:30 p. m.

BALLROOM

1. "The Dermatologist in the Navy," Lieut. Lauren M. Sompayrac, MC-V(S) USNR, Naval Hospital, Jacksonville

Some observations made by a dermatologist attached to naval hospital.

- Discussion: Lieut. A. Buist Litterer, MC-V(S) USNR, Naval Hospital, Jacksonville
Captain Rothwell Lefholz, MC, Station Hospital, Ft. Jackson, S. C.

2. "Roentgen Aids in the Diagnosis and Localization of Intracranial Conditions" (Lantern slides), W. McL. Shaw and W. Tracy Haverfield, Jacksonville.

Patients having neurologic symptoms often present problems in diagnosis: Is the patient a brain tumor, a traumatic lesion, or a degenerative one? If there is a space-encroaching lesion, where is it located? These are questions to be answered. The answer can often be found by a roentgen examination, and this study can best be made by the roentgenologist and neurologic surgeon working as a team. Some of the results obtained by such a team are presented. Encephalograms or ventriculograms of various types of intracranial lesions with their presenting symptoms will be shown. The importance of the roentgen study in localization will be stressed and operative findings given.

Discussion

3. "Bed Rest in Coronary Thrombosis" (Lantern slides), James A. Bradley, St. Petersburg

This paper will raise the question as to whether the period of bed rest recommended in cases of coronary thrombosis, usually from six to eight weeks, is sufficiently long.

Discussion: T. Z. Cason, Jacksonville
W. C. Blake, Tampa

SMOKER — "PALM BEACH NIGHTS"

Monday, 9:00 p. m.

GRILLE ROOM
(Ladies invited)

Admission by F. M. A. badge only

TUESDAY

PAST PRESIDENTS' BREAKFAST

Tuesday 8:15 a. m., Room 468
(\$1.00 — Hotel guests exempt)

SECOND SCIENTIFIC ASSEMBLY

Tuesday, 9:00 to 11:30 a. m.

WAR PROBLEMS

4. "Some Medical Problems of Flight" (Lantern slides), Major Nathan S. Rubin, MC, Station Hospital, Panama City

This paper deals with some physiologic and potential pathologic consequences of aviation, not only from the standpoint of the pilot (civilian as well as military), but also from the standpoint of the civilian air traveler, with special reference to the ear and upper respiratory mechanism.

Discussion: Commander Guy Fish, MC, USN, Miami Air Station, Miami

5. "The Management of Severe Craniocerebral Injuries, With Special Reference to Compound and Penetrating Wounds" (Lantern slides), J. G. Lyerly, Jacksonville

There is given a discussion of severe brain injuries, in most cases associated with compound fractures of the skull and depressed fragments of bone and other foreign material driven into the cranial cavity. This type of wound may become frequent in the near future because of the present war. Not only the soldiers at the front, but the civilians in their homes may be subjected to severe skull and brain injuries, which may be somewhat different from those ordinarily seen in automobile accidents. It is important that every physician should understand not only the emergency management but also the medical and surgical treatment of these cases in his community.

Discussion: W. Duncan Owens, Miami Beach

6. "Wounds of the Abdomen" (Lantern slides), J. W. Snyder, Miami

The etiology and pathology of both penetrating and nonpenetrating wounds of the abdomen will be considered together with the probable improvement in our mortality statistics under chemotherapy.

Discussion: J. M. McClamroch, Miami

7. "Burns, Various Types; Treatment and Prognosis from the Military as Well as the Civilian Viewpoint," Lieut. Commander Robert S. Widmeyer, MC-V(S) USNR, Naval Hospital, Jacksonville

A brief history of the treatment of burns, the different classifications; a discussion of the burns resulting from chemical warfare, a threat during these times. A description of the incendiary bomb and the proper way to deal with it. General treatment of burns in the home, the civilian hospital and the military hospital.

Discussion: Lieut. Commander L. A. Wylie, MC-V(S) USNR, Naval Hospital, Jacksonville

SECOND GENERAL SESSION

Tuesday, 11:35 a. m.
BALLROOM

Call to Order, Walter C. Jones, President

Address (By invitation), "Injuries of the Chest" (Lantern slides), Daniel C. Elkin, Professor of Surgery, Joseph P. Whitehead Foundation, Emory University, Atlanta, Ga.

THIRD SCIENTIFIC ASSEMBLY

Tuesday, 2:00 to 4:15 p. m.
BALLROOM

8. "Shock" (Lantern slides), Wilbur O. Arnold, West Palm Beach

Shock, a peripheral circulatory failure, is associated with a large variety of both surgical and medical conditions. The mechanism and pathologic physiology, as well as laboratory tests useful in detecting this condition before it can be diagnosed from clinical observations are described. Treatment, with emphasis on prevention and early recognition.

Discussion: Walter C. Jones, Miami
S. Marion Salley, Miami

9. "Lobectomy and Pneumonectomy; Report of Eight Cases" (Lantern slides), Kenneth A. Morris, Jacksonville

The progress made in thoracic surgery in recent years has placed the operation of lobectomy and pneumonectomy on a sound surgical basis. Improvements in technic and anesthesia, especially in endotracheal anesthesia, have made exploration of the thoracic cavity comparable to exploration of the abdomen. A better understanding of the physiology of respiration and circulation has been an important factor. The problem of safe closure of the bronchus following removal of the lung still remains unsolved. Eight cases are reported to illustrate the benefits of this procedure and to point out some of the more common and important indications.

Discussion: J. Maxey Dell, Jr., Gainesville
Raymond H. King, Jacksonville

10. "Perforated Peptic Ulcer; Some Experiences at Duval County Hospital" (Lantern slides), Martin Mangels, Jr. and Edward Jelks, Jacksonville (From Department of Surgery, Duval County Hospital, Jacksonville)

The cases presented are from the records of the Duval County Hospital for seven years. During the first three and a half years, the hospital operated under the rotating internship system; during the last three and a half, under the residency system. A comparison is made between the work in these two periods.

Discussion: Harrison A. Walker, Miami Beach
Leland F. Carlton, Tampa

SECOND MEETING OF HOUSE OF DELEGATES

Tuesday, 4:30 p. m.
PARLOR A, MEZZANINE FLOOR

Roll Call (*No alternates are to be seated for delegates attending yesterday's meeting*)

Recommendations of Reference Committees:

- No. 1, Health and Education
No. 2, Public Policy
No. 3, Finance and Administration

Other unfinished business

Announcements

Adjournment

ASSOCIATION DINNER

Tuesday, 7:30 p. m.
MAIN DINING ROOM

Dinner tickets (\$3.00 — Hotel guests exempt) may be obtained at the registration desk

AWARDING OF PRIZES

Tuesday, 9:30 p. m.
Golf, Fishing, Skeet and Trapshooting

DANCE

Tuesday, 10:00 p. m.
MAIN DINING ROOM

WEDNESDAY**FOURTH SCIENTIFIC ASSEMBLY***Wednesday, 9:30 to 11:55 a. m.***BALLROOM**

11. "Modern Diagnostic Procedures in Syphilis," L. C. Gonzales, Jacksonville

The procedures necessary to arrive at a diagnosis of syphilis are described, with special emphasis on the interpretation of the serologic test and the importance of the routine application of a spinal fluid examination in all cases. A more rational classification of the disease, which has been generally adopted, is given.

Discussion: Wiley M. Sams, Miami
J. N. Patterson, Jacksonville

12. "The Use of Vitamin K in Obstetrics," Harold G. Nix, Tampa

The incidence of hemorrhagic disease of the newborn is sufficiently high to warrant the routine use of some measure to prevent its occurrence. The use of vitamin K by the obstetrician will largely eliminate this disease in the newborn.

Discussion: Randolph Perdue, Miami
Dorothy D. Brame, Orlando

13. "Pyurias in Childhood; Their Significance and Treatment" (Lantern slides), Warren W. Quillian, Coral Gables

A brief resume of clinical conditions associated with acute and chronic pyuria. Some suggestions concerning diagnosis and treatment. The cause of chronic pyuria and its surgical relief.

Discussion: Louis M. Orr, Orlando
Luther W. Holloway, Jacksonville

14. Clinicopathologic Conference, Lloyd J. Netto, Director, West Palm Beach; V. M. Johnson, Pathologist, West Palm Beach

THIRD GENERAL SESSION*Wednesday, 12:00 noon***BALLROOM**

President Jones in the Chair
Unfinished Business
New Business
Election of President-Elect
Election of First Vice-President
Election of Second Vice-President
Election of Third Vice-President
Election of Secretary-Treasurer and Editor of the Journal
Dr. Gilbert S. Osincup escorted to the Chair as new president
Presentation of Past President's Button to Dr. Walter C. Jones by Dr. William E. Ross
Adjournment

SPECIALTY GROUP MEETINGS
**TWENTY-THIRD ANNUAL MEETING
FLORIDA RAILWAY SURGEONS
ASSOCIATION**
OFFICERS

J. W. Alsobrook, President..... Plant City
Reddin Britt, Vice-President..... St. Augustine
W. C. Page, Secretary-Treasurer..... Cocoa

COMMITTEES**EXECUTIVE**

John R. Boling, Chairman..... Tampa
J. H. Pittman..... West Palm Beach
A. A. Poucher..... Wauchula

SCIENTIFIC

Frank D. Gray, Chairman..... Orlando
L. W. Blake..... Bradenton
J. Maxey Dell..... Gainesville

NECROLOGY

H. V. Weems, Chairman..... Sebring
J. S. Helms, Jr..... Tampa
J. B. Parramore..... Key West

GENERAL SESSION*Monday, April 13***BALLROOM**

- 9:00 a. m. Call to order, J. W. Alsobrook, President
Invocation
Address of Welcome
Response by the President
Annual Address of the President
Report of Secretary-Treasurer
Reports of Standing Committees

10:00 a. m. **SCIENTIFIC PROGRAM**

12:00 noon Business Meeting and Election of Officers

**FOURTH ANNUAL MEETING
FLORIDA SOCIETY OF OPHTHALMOLOGY
AND OTOLARYNGOLOGY**
OFFICERS

S. B. Forbes, President..... Tampa
Shaler Richardson, Vice-President..... Jacksonville
Carl E. Dunaway, Secretary..... Miami

Sunday, April 12

RESIDENCE OF DR. W. Y. SAYAD
5 GOLF VIEW ROAD, PALM BEACH

3:00 p. m. **Scientific Session**

1. "Retinal Hemorrhage in a Case of Rattlesnake Bite," J. N. McLane, Pensacola
Discussion: W. Y. Sayad, West Palm Beach
2. "Factors Influencing the Formation of Blebs After Corneoscleral Trephining," Hollis C. Ingram, Orlando
Discussion: Francis C. Skilling, Miami
3. "Address (By invitation), "Cataracts," Frank E. Burch, St. Paul, Minn.

5:30 to 7:00 p. m. Cocktail Party and Buffet Supper

*Monday, April 13***DUKE'S SUITE**

9:00 a. m. **Scientific Session**

1. "Acute Infections of the Nasal Passages," J. Lunsford Boone, Jacksonville
Discussion: Orville N. Nelson, Bay Pines
2. President's Address, S. B. Forbes, Tampa
3. "The Mechanism of Vertigo," Millen A. Nickle, Clearwater
Discussion: Whitman C. McConnell (By invitation), St. Petersburg; C. Gordon Merrick, Ft. Myers
4. Address (By invitation), "Glaucoma," Frank E. Burch, St. Paul, Minn.

12:30 p. m. Luncheon (\$1.50 — Hotel guests exempt), Duke's Suite

Business Meeting and Election of Officers

FOURTH ANNUAL MEETING**FLORIDA SECTION****AMERICAN COLLEGE OF PHYSICIANS****OFFICERS**

W. W. George, President..... West Palm Beach
Kenneth Phillips, Secretary..... Miami

*Monday, April 13***ROOM 401**

10:00 a. m. **Scientific Session**

1. "Clinical Management of Hodgkin's Disease,"
(a) Discussion from Clinical Viewpoint, W. Wellington George, West Palm Beach
(b) Discussion from Radiological Viewpoint, F. K. Herpel, West Palm Beach
2. "X-Radiation in the Treatment of Pituitary Basophilism," George R. Crisler, Winter Park
3. "Gastrointestinal Lesions Simulating Angina Pectoris," Paul B. Welch, Miami
4. "Resume on Nephrosis in Childhood," J. Sudler Hood, Clearwater

Election of Officers

12:00 noon Luncheon (\$1.50 — Hotel guests exempt), Room 401

FOURTH ANNUAL MEETING, FLORIDA
ASSOCIATION OF **INDUSTRIAL SURGEONS**

OFFICERS

G. F. Oetjen, President..... Jacksonville
Frank D. Gray, President-Elect..... Orlando
W. G. Harris, Vice-President..... Jacksonville
Kenneth A. Morris, Sec.-Treas..... Jacksonville

Sunday, April 12

ROOM 428

2:30 p. m. President's Address, G. F. Oetjen, Jacksonville
2:45 p. m. "Industrial Surgery," C. F. Holton, Savannah, Ga. (20 minutes)
3:30 p. m. Business Meeting
5:00 p. m. Election of Officers
5:30 p. m. Smoker, Room 428

ELEVENTH ANNUAL SPRING MEETING
FLORIDA **RADIOLOGICAL SOCIETY**

OFFICERS

John N. Moore, President..... Ocala
Elliott M. Hendricks, Vice-President..... Ft. Lauderdale
Walter A. Weed, Sec.-Treas..... Orlando

Sunday, April 12

ROOM 468

2:30 p. m. Round Table Discussion
6:00 p. m. Banquet (\$2.00 — Hotel guests exempt)
8:30 p. m. Round Table Discussion

Monday, April 13

ROOM 468

9:00 a. m. Business Meeting and Election of Officers

SEVENTH ANNUAL MEETING
FLORIDA **PEDIATRIC SOCIETY**

OFFICERS

Warren W. Quillian, President..... Coral Gables
Ludo von Meysenbug, Vice-President..... Daytona Beach
George N. Leonard, Secretary..... Miami Beach

Monday, April 13

ROOM 469

9:30 a. m. At this session scientific papers will be read by members of the society
11:00 a. m. Election of Officers and Business Meeting
12:15 p. m. Luncheon (\$1.50 — Hotel guests exempt)
Room 469

REGULAR QUARTERLY MEETING OF THE
FLORIDA ASSOCIATION OF **DERMATOLOGY**
AND **SYPHILOLOGY**

OFFICERS

Wiley M. Sams, President..... Miami
Lauren M. Sompayrac, Secretary..... Jacksonville

Monday, April 13

GOOD SAMARITAN HOSPITAL

9:00 a. m. Clinical Session
11:00 a. m. Discussion of Cases

Monday, April 13

ROOM 488, BILTMORE HOTEL

12:00 noon Luncheon (\$1.50 — Hotel guests exempt),
Business Meeting and Election of Officers

FLORIDA **HEALTH OFFICERS**

OFFICERS

J. B. Parramore, President..... Key West
C. A. O'Quinn, Vice-President..... Perry
T. E. Cato, Secretary..... Miami

Monday, April 13

ROOM 487

9:00 a. m. "Epidemiology, Its Importance," O. W. Schwalb, Ft. Lauderdale
9:50 a. m. "Venereal Disease Control in Areas Adjacent to Army Camps," J. R. McEachern, Tampa
10:30 a. m. "Administration of a Small Health Unit," George A. Dame, Fernandina
11:10 a. m. Health Officers' Round Table Discussion
Announcements

WOMAN'S AUXILIARY
SIXTEENTH ANNUAL MEETING

LOCAL COMMITTEE CHAIRMEN

Mrs. W. C. Williams..... General Chairman
Mrs. William Y. Sayad..... Program
Mrs. V. M. Johnson..... Decorations
Mrs. B. B. Sory..... Registration
Mrs. J. R. Sory..... "
Mrs. Harry A. Wakefield..... "
Mrs. Frederick K. Herpel..... Transportation
Mrs. James L. Carlisle..... Publicity
Mrs. W. O. Arnold..... "
Mrs. W. W. George..... Hospitality
Mrs. K. E. Montgomery..... Information
Mrs. V. D. Stone..... Flowers

REGISTRATION

Ladies from out of town are requested to go direct to the registration desk for their official programs and badges. Local ladies are requested to register Sunday afternoon, to make way for the guests who will arrive on Monday.

PROGRAM

Monday, April 13

12:00 noon Luncheon for State Auxiliary (*Inquire at information desk*)
2:30 p. m. Visitors are invited to make arrangements at information desk for shopping and sight-seeing trips
9:00 p. m. Smoker — "Palm Beach Nights," Grille Room (*Admission by F. M. A. badge only*)

Tuesday, April 14

9:30 a. m. General Auxiliary Session, Grille Room
Call to Order, Mrs. W. J. Barge, President
Invocation, Dr. Ira D. S. Knight
Address of Welcome, Mrs. F. K. Herpel
Response, Mrs. F. W. Krueger
Recognition of Past Presidents
Recognition of President of Florida Medical Association
Recognition of Chairman of Advisory Committee
In Memoriam, Mrs. Gordon H. Ira
Reading of Minutes and Treasurer's Report, Mrs. H. A. Leavitt
Reports:
Credentials and Registration Committee
Officers, Standing Committees
District Chairmen
County Auxiliaries
Special Committees
Unfinished Business
New Business
Election of Officers
Report of Courtesy Resolution Committee
Presentation of Gavel
Presentation of President's Pin
Reading of Minutes
Announcements
Adjournment
1:00 p. m. Luncheon (*Inquire at information desk*)
Postconvention Board Meeting
2:30 p. m. Tour of Gardens
5:00 p. m. Tea at Norton Gallery and School of Art
7:30 p. m. Association Dinner, Palm Beach Biltmore Hotel
Wednesday, April 15
Arrangements may be made at information desk for shopping and sight-seeing trips

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

WALTER C. JONES, M.D., President.....Miami
GILBERT S. OSINCUP, M.D., President-Elect....Orlando
LUTHER W. HOLLOWAY, M.D., 1st Vice-Pres. Jacksonville
FREDERICK K. HERPEL, M.D., 2nd Vice-Pres. W. Palm Bch.
WALTER C. PAYNE, M.D., 3rd Vice-Pres.....Pensacola
SHALER RICHARDSON, M.D., Sec'y-Treas....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.....Jacksonville

EXECUTIVE

LOUIE M. LIMBAUGH, M.D., Chm., "C," '44..Jacksonville
J. ROCHER CHAPPELL, M.D., "E," '43.....Orlando
GEORGE L. COOK, M.D., "D," '42.....Tampa
FREDERICK K. HERPEL, M.D., "F," '43..W. Palm Beach
WALTER C. PAYNE, M.D., "A," '44.....Pensacola
WILLIAM C. THOMAS, M.D., "B," '42.....Gainesville
WALTER C. JONES, M.D. (Ex-Officio).....Jacksonville
SHALER RICHARDSON, M.D. (Ex-Officio).....Jacksonville
STEWART G. THOMPSON, D.P.H. (Advisory).....Jacksonville

SCIENTIFIC WORK

H. E. WHITE, M.D., Chairman, "C," '43..St. Augustine
LELAND F. CARLTON, M.D., "D," '42.....Tampa
CHARLES J. COLLINS, M.D., "E," '43.....Orlando
ROBERT B. HARKNESS, M.D., "B," '42.....Lake City
HOMER L. PEARSON, M.D., "F," '44.....Miami
JAMES H. POUND, M.D., "A," '44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAIK, M.D., Chm., "C," '43..Jacksonville
LAURIE J. ARNOLD, JR., M.D., "B," '44.....Lake City
HORACE A. DAY, M.D., "E," '44.....Orlando
WHITMAN C. MCCONNELL, M.D., "D," '42..St. Petersburg
BRUCE M. RHODES, M.D., "A," '42.....Tallahassee
JOSEPH S. STEWART, M.D., "F," '43.....Miami
WALTER C. JONES, M.D. (Ex-Officio).....Miami
SHALER RICHARDSON, M.D. (Ex-Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, JR., M.D., Chm., "D," '42.....Tampa
REDDIN BRITT, M.D., "C," '42.....St. Augustine
ROBERT D. FERGUSON, M.D., "B," '43.....Ocala
J. N. MCCLANE, M.D., "A," '44.....Pensacola
CAYETANO PANETTIERE, M.D., "F," '44.....Miami Beach
WALTER A. WEED, M.D., "E," '43.....Orlando

PUBLIC RELATIONS

J. RALSTON WELLS, M.D., Chm., "C," '42 Daytona Beach
WILBUR L. ASHTON, M.D., "E," '42.....Jacksonville
SIDNEY G. KENNEDY, M.D., "A," '43.....Pensacola
BAILEY B. SORRY, JR., M.D., "F," '44.....Palm Beach
JAMES L. STRANGE, M.D., "B," '44.....McIntosh
HARPER E. WHITAKER, M.D., "D," '43.....Tampa

NECROLOGY

HUBERT A. BARGE, M.D., Chairman, "F," '42....Miami
HAYNSWORTH D. CLARK, M.D., "E," '42.....Ft. Pierce
AUGUSTUS E. CONTER, M.D., "A," '43.....Apalachicola
GEORGE R. CREEKMORE, M.D., "B," '43.....Brooksville
JULIAN L. HARGROVE, M.D., "D," '44.....Bartow
ARTHUR J. LOGIE, M.D., "C," '44.....Jacksonville

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm., "C," '42.....Jacksonville
HERBERT L. BRYANS, M.D., "A," '43.....Pensacola
W. WELLINGTON GEORGE, M.D., "F," '43..W. Palm Beach
FRANK D. GRAY, M.D., "E," '44.....Orlando
DAVID R. MURPHEY, JR., M.D., "D," '44.....Tampa
GEORGE C. TILLMAN, M.D., "B," '42.....Gainesville

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chairman, "F," '44.....Miami
JAMES M. HOFFMAN, M.D., "A," '42.....Pensacola
HEWITT JOHNSTON, M.D., "E," '43.....Orlando
J. N. MOORE, M.D., "B," '44.....Ocala
R. W. S. OWEN, M.D., "D," '43.....St. Petersburg
HARRY A. PEYTON, M.D., "C," '42.....Jacksonville

MEDICAL ECONOMICS

H. A. WALKER, M.D., Chm., "F," '44.....Miami Beach
EDWIN H. ANDREWS, M.D., "B," '44.....Gainesville
ROBERT P. HENDERSON, M.D., "E," '43.....Orlando
EDWARD JELKS, M.D., "C," '42.....Jacksonville
JOSEPH W. TAYLOR, M.D., "D," '42.....Tampa
COURTLAND D. WHITAKER, M.D., "A," '43.....Marianna

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm., "C," '42..Jacksonville
ELMO D. FRENCH, M.D., "F," '44.....Miami
ALVIN L. MILLS, M.D., "D," '44.....St. Petersburg
LOUIS M. ORR, II, M.D., "E," '42.....Orlando
JOHN H. THOMAS, M.D., "B," '43.....Gainesville
JOE I. TURBERVILLE, M.D., "A," '43.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm., "F," '44..Ft. Lauderdale
ISAAC M. HAY, M.D., "E," '42.....Melbourne
JOHN E. MAINES, JR., M.D., "B," '44.....Gainesville
GEORGE C. OVERSTREET, M.D., "D," '42.....Lakeland
EDWIN C. SWIFT, M.D., "C," '43.....Jacksonville
RUFUS THAMES, M.D., "A," '43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

M. JAY FLIPSE, M.D., Chairman, "F," '42.....Miami
WILLIAM C. BLAKE, M.D., "D," '42.....Tampa
J. MAXEY DELL, JR., M.D., "B," '44.....Gainesville
DUNCAN T. McEWAN, M.D., "E," '43.....Orlando
ROBERT G. NOBLES, M.D., "A," '44.....Pensacola
LUDO VON MEYSENBURG, M.D., "C," '43..Daytona Beach

STATE CONTROLLED MEDICAL INSTITUTIONS

ROLLIN D. THOMPSON, M.D., Chm., "E," '44..Orlando
HARRY S. HOWELL, M.D., "B," '43.....Lake City
PAUL KELLS, M.D., "F," '43.....Miami
ERNEST B. MILAM, M.D., "C," '42.....Jacksonville
WILLIAM D. ROGERS, M.D., "A," '44..Chattahoochee
WILLIAM M. ROWLETT, M.D., "D," '42.....Tampa

MATERNAL WELFARE

LAUCHLIN M. ROZIER, M.D., Chm., "F," '42..W. Palm Bch.
LAURIE L. DOZIER, M.D., "A," '44.....Tallahassee
I. M. HAY, M.D., "E," '43.....Melbourne
W. WARBLAW JONES, M.D., "B," '44.....Dade City
ROBERT G. NELSON, M.D., "D," '42.....Tampa
FERDINAND RICHARDS, M.D., "C," '43.....Jacksonville

CHILD HEALTH

W. W. QUILLIAN, M.D., Chm., "F," '44....Coral Gables
THOMAS M. PALMER, M.D., "C," '43.....Jacksonville
EUGENE G. PEEK, M.D., "B," '42.....Ocala
COUNCILL C. RUDOLPH, M.D., "D," '42..St. Petersburg
WILLIAM E. SINCLAIR, M.D., "E," '44.....Orlando
ALVYN W. WHITE, M.D., "A," '43.....Pensacola

ADVISORY TO WOMAN'S AUXILIARY

GORDON H. IRA, M.D., Chm., "C," '42.....Jacksonville
JAMES L. CHALKER, M.D., "B," '42.....Ocala
LUTHER C. FISHER, JR., M.D., "A," '43.....Pensacola
JOHN D. HAGOOD, M.D., "D," '43.....Clearwater
LAWRENCE C. INGRAM, M.D., "E," '44.....Orlando
ARTHUR L. WALTERS, M.D., "F," '44.....Miami Beach

COUNCILOR DISTRICTS AND COUNCILORS

Twelfth—W. DUNCAN OWENS, M.D., Chm., '43 Miami Bch.
First—WILLIAM C. ROBERTS, M.D., '42....Panama City
Second—C. D. WHITAKER, M.D., '43.....Marianna
Third—J. M. PRICE, M.D., '43.....Live Oak
Fourth—ALVA T. COBB, M.D., '42.....Gainesville
Fifth—LUCIEN Y. DYRENFORTH, M.D., '43..Jacksonville
Sixth—MAXIMILIAN STERN, M.D., '42.....Daytona Beach
Seventh—JOHN R. BOLING, M.D., '43.....Tampa
Eighth—HOWARD V. WEEMS, M.D., '42.....Sebring
Ninth—CARL D. HOFFMANN, M.D., '42.....Orlando
Tenth—E. B. HARDEE, M.D., '43.....Vero Beach
Eleventh—ROBERT L. ELLISTON, M.D., '42..Ft. Lauderdale

REPRESENTATIVES TO INDUSTRIAL COUNCIL

JULIUS C. DAVIS, M.D., Chairman, "A," '43....Quincy
THOMAS H. BATES, M.D., "B," '43.....Lake City
R. RENFRO DUKE, M.D., "D," '44.....Tampa
WILLIAM S. MANNING, M.D., "C," '42.....Jacksonville
RICHARD H. WALKER, JR., M.D., "E," '44.....Orlando
ARTHUR H. WEILAND, M.D., "F," '42.....Coral Gables

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
SHALER RICHARDSON, M.D.....Jacksonville
JAMES E. PAULLIN, M.D., (A.M.A. Ex-Officio).....Atlanta

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate..West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM E. ROSS, M.D., Chairman, 1919..Jacksonville
W. HENRY SPIERS, M.D., Secretary, 1938.....Orlando
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902..Pensacola
HENRY E. PALMER, M.D., 1909.....Tallahassee
ROBERT H. MCGINNIS, M.D., 1915.....Jacksonville
FREDERICK J. WALTER, M.D., 1918.....San Diego, Calif.
WILLIAM P. ADAMSON, M.D., 1920.....Tampa
H. MARSHALL TAYLOR, M.D., 1923.....Jacksonville
JOHN C. VINSON, M.D., 1924.....Tampa
JOHN S. McEWAN, M.D., 1925.....Orlando
H. MASON SMITH, M.D., 1926.....Tampa
JOHN A. SIMMONS, M.D., 1927.....Arcadia
FREDERICK J. WAAS, M.D., 1928.....Jacksonville
HENRY C. DOZIER, M.D., 1929.....Ocala
JULIUS C. DAVIS, M.D., 1930.....Quincy
GERRY R. HOLDEN, M.D., 1932.....Jacksonville
WILLIAM M. ROWLETT, M.D., 1933.....Tampa
HOMER L. PEARSON, M.D., 1934.....Miami
HERBERT L. BRYANS, M.D., 1935.....Pensacola
ORION O. FEASTER, M.D., 1936.....St. Petersburg
EDWARD JELKS, M.D., 1937.....Jacksonville
LEIGH F. ROBINSON, M.D., 1939.....Ft. Lauderdale
J. SAM TURBERVILLE, M.D., 1940.....Century



DANIEL C. ELKIN, M.D., OUR GUEST OF HONOR

Daniel Collier Elkin was born in Louisville, Kentucky, March 26, 1893. His early boyhood was spent at Elkin Place, near Lancaster, Kentucky.

He attended Andover and Yale, where he received his A.B. degree in 1916, following which he enrolled in the Emory Medical School in 1916. After graduating in medicine, he studied for three years under the late Dr. Harvey Cushing in Boston. Then he returned to Atlanta, becoming a member of the Emory Medical Faculty. He taught anatomy, surgical pathology and surgery until 1929, when he was elected professor of surgery.

In 1939, the trustees of the Joseph B. Whitehead Foundation endowed a chair of surgery at Emory University Medical School and Dr. Elkin was elected to fill this position. Today, he is chief surgeon both at the Emory University Hospital and the Emory division of the Grady Hospital in Atlanta.

Dr. Elkin specializes in surgery of the chest and blood vessels. The Matas award, professionally rated one of the two greatest distinctions a North American surgeon can win, was presented to him on November 14, 1940, as an acknowledgement of outstanding original work in the field of vascular surgery. Dr. Elkin's outstanding contributions in this field have been his work in stab wounds of the heart and his success in treating an aneurysm of the abdominal aorta by ligation. His was one of three such operations recorded as successful in surgical history.

The Journal of The Florida Medical Association

Owened and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D. *Orlando*
FRANK C. METZGER, M.D. *Tampa*
HOMER L. PEARSON, M.D. *Miami*
J. H. POUND, M.D. *Tallahassee*
W. MCL. SHAW, M.D. *Jacksonville*

COMMITTEE ON PUBLICATION

GEORGE D. LILLY, M.D., Chairman *Miami*
SHALER RICHARDSON, M.D. *Jacksonville*
HERMAN WATSON, M.D. *Lakeland*

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman *Jacksonville*
THEODORE F. HAHN, M.D. *Deland*
COUNCIL C. RUDOLPH, M.D. *St. Petersburg*

WAR PROBLEMS

The Association's Committee on Scientific Work, under the leadership of Dr. Herbert E. White, chairman, has prepared a splendid scientific program. One outstanding feature of this program will be the session on Tuesday, dealing with war problems. Dr. White urges a large attendance at this Tuesday session, when there will appear some outstanding essayists who have been relieved of duty for the occasion. Immediately following the program on war problems Tuesday forenoon, Dr. Daniel C. Elkin, Professor of Surgery, Joseph P. Whitehead Foundation, Emory University, Atlanta, Ga., will appear as the Association's guest speaker.

NOTICE TO DELEGATES AND COMMITTEE CHAIRMEN

The first meeting of the House of Delegates will be held on Monday at 3 p. m. in the Palm Beach Biltmore Hotel. Delegates are requested to register as soon after arrival as possible. The registration desk will be located at the end of the technical exhibit hall.

A special badge button has been prepared for each member who is to be seated in the House of Delegates. To secure a delegate's badge button, official credentials signed by the secretary of his county medical society must be presented by the delegate at the registration desk. Visitors to the House of Delegates are requested to use the section of the room arranged for them, in order that official delegates may sit together, as provided for in the By-Laws.

Chairmen of standing committees are urged to be present on time so their reports may be read as scheduled in the official program. All committee reports and resolutions are to be prepared in duplicate and both copies laid on the speaker's table immediately after reading.

Delegates and committee chairmen, please note the time and date of the first meeting of the House of Delegates—3 p. m., Monday, April 13, Palm Beach Biltmore Hotel.

GRADUATE SHORT COURSE

Complete information concerning this year's graduate short course will be published in your April and May Journals. The official dates set for the course, which will be held at the George Washington Hotel in Jacksonville, are June 22 to 27, 1942 inclusive. Keep this important occasion in mind and give it the real support it merits.

THE TECHNICAL EXHIBIT

The firms listed below will contribute materially to the success of the convention. Make it a point to visit each booth some time during the Annual Meeting.

A. S. ALOE COMPANY

The A. S. Aloe Company of St. Louis, Missouri, will exhibit in booth number 1 a complete line of genuine, American-made, stainless steel instruments, physicians' equipment, laboratory supplies and electrotherapy apparatus. Many new items of interest to the medical profession will also be on display at our booth. The display will be in charge of our Florida representatives, Messrs. A. A. Vaughan and Dudley Keith.

AMERICAN HOSPITAL SUPPLY CORPORATION

Don't fail to see the demonstration of the new, amazingly simple and safe technic for the preparation, banking and administration of plasma and serum with Baxter Centri-Vac and Plasma-Vac containers, in booth number 37. A new plasma sedimentation technic, particularly adapted for small hospitals will also prove of interest. Two other well known Baxter products, the Transfuso-Vac and intravenous solutions (including sulfanilamide) in Baxter Vacoliters will also be demonstrated. You will see the improved Tomac Gastro Evacuator which provides 100% more suction; the Myrick Bedside Sterilizer; the remarkable new sheeting material, Tomac Exelyn; and the Tomac Plaster Bandage Machine, which makes a perfect bandage a minute.

AMERICAN OPTICAL COMPANY

Doctor: At your 69th annual convention, Palm Beach Biltmore Hotel, April 13 to 15, we shall display in booth 30 a number of our precision-built professional products, notably, the AO Diagnostic Set, Friedenwald Ophthalmoscope, AO Color Perception Test, Hague Cataract Lamp, Phoropter, Project-O-Chart, Tillyer Test Lens Set and the AO Focal Illuminator complete with Transilluminator. We shall be glad to demonstrate any of this equipment at your convenience. Suggest you make it a point to visit our booth some time during the convention. American Optical Company, Southbridge, Mass.

BARD-PARKER COMPANY, INC.

The following products will be exhibited at the Bard-Parker booth, number 12: Rib-Back Surgical Blades, Long Knife Handles for deep surgery, Renewable Edge Scissors, Transfer Forceps, Hematological Case for obtaining bedside blood samples, Ortholator for obtaining accurate dental radiographs.

THE BORDEN COMPANY

For all the news about Borden's scientifically designed infant foods, visit booth number 36. Biolac (liquid modified milk) fully satisfies all nutritional requirements of early infancy except vitamin C. New Improved Dryco (with quicker solubility and increased potencies of vitamins A and D) offers maximum formula flexibility to meet varying nutritional needs. Mull-Soy is an exceptionally palatable and readily digestible emulsified food for infants allergic to milk. Other outstanding infant foods include Beta Lactose, Klim, Merrell-Soule Powdered Milks and Borden's Silver Cow Irradiated Evaporated Milk. Our representative, Mr. L. B. Bell, will greet you in our booth.

CAMEL CIGARETTES

Camel Cigarettes will exhibit in booths number 2 and 3 large detailed photographs of equipment used in comparative tests of the five largest-selling brands of cigarettes. These tests proved that Camels burn slower and contain less nicotine in the smoke than other cigarettes. Representatives will be available to discuss this research.

CAMERON SURGICAL SPECIALTY COMPANY

Visit booth number 31 and see the new Cameron-Schindler Flexible Gastroscope, the Color-Flash Clinical Camera, the Projectoray, the Mirrolite, and latest developments in electrically lighted Diagnostic and Operating instruments for all parts of the body. Of special interest will be the new inexpensive office model Radio Knife, Combination Spark Gap & Tube Electro-Surgical Unit, and other Electro-Surgical Units for cutting, coagulating, desiccation, fulguration and ultra-violet therapy in all sizes from the office model to the hospital unit with an abundance of power for the most radical surgery and transurethral prostatic resections.

DEPUY MANUFACTURING COMPANY

DePuy will exhibit in booth number 39 modern Fracture Appliances of their own manufacture, made of stainless steel and chrome nickel steel. Simple, usable splints, Kirschner Drills and Kirschner Bows for skeletal traction, Thompson-Pease Bow for using Kirschner wires for positive transfixion of fractures in the lower leg as well as many other modern appliances. No high-pressure methods will be used in the DePuy booth—so come in and look if you don't want to buy; you will be greeted with the same courtesy as if you do. Harvie Breathitt or H. H. Leiter will be on hand, to greet you.

ENDO PRODUCTS, INC.

Physicians attending the meeting are invited to stop at the Endo Products exhibit in booth number 28. Trained representatives will be on hand to discuss the American Medical Association Council-accepted items and other specialties in the Endo catalog, which have received wide acceptance by the medical profession. Mr. Homer H. Leonard, our Southern Divisional Manager, will be in charge of the exhibit. He and other Endo representatives will be looking forward to saying hello to their many Florida friends.

EVERHART SURGICAL SUPPLY COMPANY

The Everhart Surgical Supply Company of Atlanta will have its exhibit in booth number 35 at the Palm Beach meeting. This firm has been serving doctors in Florida for the past twenty-five years, representing Hamilton Furniture, DeForest Diathermy equipment, and other leading, well known surgical items. Mr. G. I. Butzer of Orlando, the Florida representative, will be in charge of the exhibit.

C. B. FLEET COMPANY

Phospho-Soda (Fleet), a saline laxative, has been presented to the Medical Profession for over fifty years. This eliminant is suggested when a rapid, nongripping action is desired. It is recommended in gallbladder disorders. The Profession is cordially invited to visit our booth, number 34.

THE FOREGGER COMPANY

Foregger Company in booth number 5 will exhibit new models of anesthesia apparatus, new developments in CO₂ Absorbers including a twin canister device for the use of the newly developed indicator soda lime; a complete line of intratracheal equipment and a representative display of oxygen therapy and resuscitation apparatus. We would be very glad indeed to have you step in and let our representative explain any of the above items that might be of interest to you.

GENERAL ELECTRIC X-RAY CORP.

The General Electric X-Ray Corporation will have an interesting exhibit of equipment and supplies in booth number 4 at the Annual Convention. The exhibit will be attended by Mr. Frank Arrington, Jacksonville; Mr. H. E. Horton, Tampa; Mr. Peter Jongedyk, Miami; and Mr. H. Spitze, Atlanta. They will be pleased to discuss these products, and cordially invite all members and guests to visit their exhibit.

HOLLAND-RANTOS COMPANY, INC.

Modern contraceptive technic will be graphically illustrated with a motion picture, and all the various contraceptive materials including both the Koromex and Hyva diaphragms, Koromex and H-R Emulsion jelly, together with the most complete line of contraceptive specialties will be demonstrated at the booth (number 22) of the Holland-Rantos Company. The new surgical Rantex Masks and Caps will also be demonstrated.

JONES METABOLISM EQUIPMENT COMPANY

Mr. Jim Merrihew will demonstrate in booth number 42 the Jones Motor Basal Metabolism Unit and the Ille Improved Method of Underwater Therapy with Hydro-Massage for the After-care of Infantile Paralysis, Arthritis and other disabling conditions.

KELEKET X-RAY CO. OF FLORIDA

As exclusive representatives for Kelley-Koett X-ray Apparatus, Liebel-Flarsheim Short Wave Equipment, Bovie Electrosurgical Units and Cambridge Hindle Electrocardiographs, typical instruments in these lines will be exhibited in booth number 26. A new Portable X-ray machine of the latest design and embodying many innovations will be shown. For the last fifteen years it has been a pleasure to see our many friends at this Annual Meeting and again we cordially invite you to say "Hello."

LEDERLE LABORATORIES, INC.

Lederle will exhibit in booth number 40 their fine Biological Products, Sulfonamides, Heparin. A representative will gladly discuss these products with physicians.

WILLIAM S. MERRELL COMPANY

Several new and interesting pharmaceutical developments will be exhibited at the Merrell booth, number 25. Members and guests of the Association are invited to stop by and discuss these with Merrell representatives.

M & R DIETETIC LABORATORIES, INC.

M & R Dietetic Laboratories, Inc., Columbus, Ohio, booth number 9, will display Similac, a food for infants deprived either partially or entirely of breast milk, and powdered SofKurd milk. Mr. E. E. Rader will be glad to discuss the merit and suggested application of these products.

C. V. MOSBY COMPANY

Doctors attending the 1942 meeting of the Florida Medical Association are cordially invited to visit the C. V. Mosby Company booth (number 19) where many new works and new editions of timely interest will be on display.

PARKE, DAVIS & COMPANY

Featured in the Parke-Davis exhibit in booth number 20 will be the sex hormones, Theelin and Theolol; anti-syphilitic agents, such as Mapharsen and Thio-Bismol; posterior lobe preparations, including Pituitrin, Pitocin and Pitressin; and various Adrenalin Chloride Preparations.

PET MILK SALES CORP.

An actual working model of a milk condensing plant in miniature will be exhibited by the Pet Milk Company in booths 16 and 17. This exhibit offers an opportunity to obtain information about the production of Irradiated Pet Milk and its uses in infant feeding and general dietary practice. Miniature Pet Milk cans will be given to each physician who visits the Pet Milk Booth.

PETROGALAR LABORATORIES

This year booth number 8 will be occupied by Petrogalar Laboratories, Inc., who offer, in addition to samples of the Five Types of Petrogalar, an interesting selection of descriptive literature and anatomical charts. Ask the Petrogalar representative, Mr. J. M. Carter, to show you the Habit Time booklet. It is a welcome aid for teaching bowel regularity to your patients.

PHILIP MORRIS AND COMPANY

Philip Morris & Company will demonstrate in booth number 38 the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

SHARP AND DOHME

Sharp & Dohme will have their new modern display at booth number 41 this year, featuring "Delvinal" Sodium, "Lyovac" Normal Human Plasma, "Lyovac" Bee Venom Solution, and other "Lyovac" biologicals. There will also be on display a group of biological and pharmaceutical specialties prepared by this house, such as "Propadrine" Hydrochloride products, "Rabellon," "Padrophyll," "Riona," "Depropanex," and "Ribothiron." Capable, well-informed representatives will be on hand to welcome all visitors and furnish information on Sharp & Dohme products.

SMITH, KLINE & FRENCH LABORATORIES

Smith, Kline & French Laboratories welcome the opportunity to display (in booth number 23) their products including Benzedrine Inhaler, Benzedrine Sulfate Tablets, Benzedrine Solution and Pentnucleotide to the members of the Association. Our representatives will be only too glad to discuss the products exhibited and to answer any questions that may arise concerning them.

THE SOUTHEASTERN OPTICAL CO., INC.

The Southeastern Optical Company who is exhibiting in booth number 10, is affiliated with the Bausch & Lomb Optical Company and distributes their Ophthalmic products including the finest in instruments and equipment. The Ortho Fusor displayed, for Orthoptic training, embodies a new three dimensional Polaroid principle.

E. R. SQUIBB & SONS

A number of new and interesting Vitamin, Glandular, Biological and Chemotherapeutic specialties will be featured in the Squibb Exhibit in booth number 14. Well informed Squibb representatives will be on hand to welcome you and to furnish any information desired on the products displayed.

SURGICAL SUPPLY COMPANY

The Surgical Supply Company (exhibiting in booth number 7), a Florida organization with stores located in Jacksonville, Tampa, Miami and Orlando, has an organization of more than fifty, including ten traveling representatives. This Company is entering upon its twenty-first year. Their line of general surgical laboratory, and hospital supplies and equipment includes many

items worthy of special mention. They are distributors of Cutter's Intravenous Solutions and Human Plasma; Scanlan Morris pressure sterilizers; Multibeam Operating Lights; Balfour Tables; Burdick and Birtcher Physiotherapy equipment; Beck Lee Hindle Cardiographs; Hamilton professional furniture; genuine Stille Instruments; Lederle Biologicals and Specialties, and many other items. This aggressive organization appreciates the opportunity to serve Florida's medical profession.

WESTINGHOUSE X-RAY DIVISION

We will be delighted to have you visit booth number 32 and discuss with our trained representatives any problem you might have concerning x-ray or physiotherapy. Any information we can give you to assist you in your needs will be entirely without obligation.

JOHN WYETH & BROTHER

You are cordially invited to visit booth number 15 where John Wyeth & Brother will exhibit its Council-accepted pharmaceutical specialties, including some of its U.S.P. and N.N.R. pharmaceuticals. Also Silver Picrate, for the treatment of Trichomonas Vaginalis Vaginitis and for the treatment of Acute Anterior Urethritis will be on display, as will be Wyeth's Alumina Phosphate Gel, for the management of special cases of Peptic Ulcer.

BIRTHS AND MARRIAGES**BIRTHS**

Dr. and Mrs. W. S. Randall of Pensacola announce the birth of a son, W. Spears, 3rd, on February 14.

Dr. and Mrs. John M. Butcher of Sarasota announce the birth of a son, David Rivers, on February 5.

MARRIAGES

Dr. G. Thomsen-von Colditz of Cocoa and Miss Priscilla Eddy of Boston, Mass., were married January 28.

Dr. Thomas C. Butt and Miss Sara Ruth Smith of Orlando were married on January 26.

STATE NEWS ITEMS

Dr. Joseph C. Bernstein of West Palm Beach has opened offices in the Comeau Building and will limit his practice to dermatology and syphilology. Dr. Bernstein was formerly an instructor in dermatology at the Johns Hopkins Medical School, and associate in dermatology at the University of Maryland Medical School.

Dr. John J. McGuire of Pensacola took special work at the Harvard University Postgraduate Medical School during the month of February.

Dr. Walter C. Jones of Miami, president of the Association, and Dr. Herbert E. White of St. Augustine, chairman of the Committee on Scientific Work, visited the headquarters' office in Jacksonville during February on official business.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, delivered an address on "Quacks and Quackery" in the auditorium of the Florida State College for Women, Tallahassee, Thursday, March 12.

Dr. Thomas A. Neal of Orlando was host at a cocktail party on January 21 to a group of doctors known as the Patriarchs. The Patriarchs include the past presidents of the Orange County Medical Society, and one of its instigators was the late Dr. Gaston Edwards.

Patriarchs and guests for the occasion were Drs. Harold M. Beardall, J. Rocher Chappell, Mitchell Andrews, C. H. Chiles, Sr., Horace A. Day, Spencer Folsom, Frank D. Gray, Frank H. Harms, Carl D. Hoffmann, L. C. Ingram, Hewitt Johnston, Meredith Mallory, John S. McEwan, Walter Weed, Gilbert S. Osincup, Louis M. Orr, J. A. Pines, William E. Sinclair, W. Henry Spiers, Charles J. Collins, Victor Frankfurth, and Joseph Green of Asheville, N. C.

ZANNIE BRANTLEY

Dr. Z. Brantley, aged 63, lifelong resident of Putnam County, died in a Palatka Hospital on February 6.

Dr. Brantley was born and reared in west Putnam County and in early manhood taught in the rural schools of that section. Later he was employed as a mail clerk, serving on the Georgia Southern Railway for a number of years. While thus engaged, he was a medical student at the Atlanta School of Medicine, attending classes on his off-trip days. He was graduated with high standing in 1913. Soon thereafter he opened an office in Crescent City, where he practiced for a short time, but he later returned to his home in Grandin to practice his profession. Recently he built and equipped a modern clinic in that city.

Despite his heavy professional duties, Dr. Brantley for years was active in the political and official affairs of the county, serving for several terms as a member of the Board of County Commissioners and as a trustee of the Melrose School District. He was for some years a member of the County Democratic Executive Committee, and was recognized as a factor in the politics of west Putnam County. He was a member of the Methodist Church and of the Masonic Lodge. He was also a member of the Putnam County Medical

Society, the Florida Medical Association and the American Medical Association.

Dr. Brantley is survived by his widow, Mrs. Rosa Lee Brantley; two sons, Warren Brantley of the State Road Department, and Dr. James W. Brantley, with whom he was associated in practice; and one brother, Weldon Brantley of Grandin.

Dr. Brantley was loved and esteemed by a host of persons throughout Putnam and adjacent counties whom he had served faithfully for so many years.

HENRY BACON

Dr. Henry Bacon, 83, died at his home in Jacksonville on February 8.

Dr. Bacon was born at St. Mary's, Ga., March 27, 1858, the son of Dr. Henry Sadler Bacon and Annie M. (O'Neill) Bacon. He attended high school at Niles, Mich., and later continued his studies in Goshen, N. Y., in preparation for his chosen profession. He then entered Bellevue Hospital Medical College in New York City and was graduated as a member of the class of 1883.

After a two-year internship in the City Hospital of New York, Dr. Bacon in 1885 began the active practice of his profession in Jacksonville, where he served for a number of years as a member of the staff of St. Luke's Hospital. He was a member of the Duval County Board of Health during the yellow fever epidemic of 1888.

In 1889 he received from Gov. E. P. Fleming a commission as surgeon general of the State of Florida with the rank of colonel, and he held this office continuously under six gubernatorial administrations. He was retired with the rank of brigadier general after nearly twenty-five years of service in the Florida National Guard.

Dr. Bacon was a member of the Protestant Episcopal Church and an honorary member of the Florida Yacht Club. For years he was actively identified with the Duval County Medical Society, serving terms as president and secretary, and also with the Florida Medical Association. Some years ago his sight became impaired and he was forced to give up active practice. He was then elected honorary member both of the Duval County Medical Society and of the State Association.

Dr. Bacon was the fourth generation of the Bacon family in the medical profession, the last three having been named Henry Bacon.

COMPONENT COUNTY SOCIETIES

COLUMBIA

The Columbia County Medical Society and the staff of the Veterans Administration Facility were hosts to Dr. John T. Tebrock of New York and Mr. O. D. Lester of Jacksonville, representing the Lederle Laboratories, on January 13. During the program, motion pictures were shown and papers were read dealing with the treatment of pneumonia and Parkinson's disease.

DADE

Dr. John W. Snyder of Miami was the principal speaker at a meeting of the Dade County Medical Society held Wednesday evening, February 4, at Biscayne Temple, when he presented a paper on "Splénomegalias with Surgical Indications." The discussion was led by Drs. T. O. Otto and Winston Harrison.

DE-SOTO-HARDEE-HIGHLANDS-CHARLOTTE-GLADES

Serving the DeSoto-Hardee-Highlands-Charlotte-Glades County Medical Society during 1942 are the following officers: Dr. L. W. Martin, Sebring, president; Dr. M. C. Kayton, Wauchula, vice president; Dr. G. H. McSwain, Arcadia, secretary-treasurer. Dr. H. V. Weems of Sebring is the Society's delegate and Dr. I. W. Chandler of Avon Park the alternate.

ESCAMBIA

Colored sound motion pictures of various diseases of the ear were presented by Dr. M. A. Lischkoff at a meeting of the Escambia County Medical Society on February 10 at the San Carlos Hotel, Pensacola.

FRANKLIN-GULF

Dr. and Mrs. Thomas Meriwether of Wewahatchka entertained the members of the Franklin-Gulf County Medical Society at a wild turkey dinner on the evening of January 20. The turkey for the occasion was shot by Dr. Meriwether who has had a successful year in his quest for big birds. Dr. J. T. Ellis of Dothan was the guest speaker.

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON

The regular quarterly meeting of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society was held on the afternoon of January 15 at the Sewano Country Club, Quincy. The

following papers constituted the scientific program: "Chronic Disease of the Lung," Dr. Lynne E. Baker, State Board of Health, Jacksonville; "Indications for Surgery in Duodenal Ulcer," Dr. George W. Morse, Pensacola; "Experience with the Obstructive Resection (Modified Mikulicz) Operation for Growth of the Colon and Sigmoid," Dr. Charles Watt, Thomasville, Georgia, discussed by Dr. J. C. Davis of Quincy.

A barbecued dinner was enjoyed following the scientific meeting.

PASCO-HERNANDO-CITRUS

Dr. and Mrs. G. R. Creekmore of Brooksville entertained the Pasco-Hernando-Citrus County Medical Society at their home Thursday evening, February 12. Dinner was served by Mrs. Creekmore promptly at 8 o'clock, following which a business and scientific meeting was held.

The minutes of the last meeting were read and adopted. Dr. P. J. Hudson invited the Society to meet with him in Crystal River in March. Dr. W. H. Walters of Lacoochee reported an interesting case which was discussed by those present.

Guests of Dr. and Mrs. Creekmore were Dr. J. T. Bradshaw, San Antonio; Drs. P. J. Hudson and W. B. Moon of Crystal River; Dr. W. H. Walters, Lacoochee, and Dr. S. C. Harvard, of Brooksville.

PINELLAS

At a meeting of the Pinellas County Medical Society held on the evening of February 7, the following papers were presented: "Sulfa-drugs in Pyocyanic Infection of the Cornea," Dr. H. D. Solomon; "Radiology," Dr. J. A. Herring.

On the evening of February 20 the society held its monthly round-table meeting at which Dr. A. L. Mills acted as moderator. Urologic problems were discussed.

POLK

Dr. Walter Bauer, Associate Professor of Medicine, Harvard University and a staff physician of the Massachusetts General Hospital, Boston, was the guest speaker at the meeting of the Polk County Medical Society held at the Walesbilt Hotel, Lake Wales on January 21. Dr. Bauer spoke on "Joints" and his talk dealt primarily with arthritis. Dr. James Boulware of Lakeland, president, presided. Besides members of

the society, 17 guest doctors from other parts of the state were present.

Dr. James B. McCord, Professor of Obstetrics and Gynecology of Emory University, Atlanta, was guest speaker at a meeting of the society held at the Walesbilt Hotel, Lake Wales on February 11. Physicians were in attendance from Sebring, Orlando, Tampa and other surrounding cities.

The Polk County Medical Society has voted to subscribe to the Journal of the Florida Medical Association for each of its members in Service. It becomes the first society to take such action.

ST. JOHNS

The St. Johns County Medical Society has reported 100 per cent of its dues for 1942. Congratulations!

VOLUSIA

The following officers have been elected by the Volusia County Medical Society: president, Dr. W. C. Pay, Deland; vice president, Dr. Ludo von Meysenbug, Daytona Beach; secretary-treasurer, Dr. R. L. Miller, Daytona Beach.

The February meeting of the Society was held on the evening of February 10 at the Stetson Commons, Deland. Dr. H. D. Higgins, recently named head of the new Volusia County Health Unit, was a guest of the society.

BOOKS RECEIVED

Acknowledgment of books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review as expedient.

OFFICE GYNECOLOGY. By Robert Greenblatt, Professor of Experimental Medicine, University of Georgia School of Medicine.

This booklet is not intended to be a textbook. It is a synopsis of the course in gynecologic endocrinology given by Dr. Greenblatt last fall to a group of postgraduate physicians. It is of especial interest to Floridians as the majority of those in this group were members of the Florida Medical Association.

The author discusses quite thoroughly the diagnosis and treatment of abnormal menopausal conditions. He especially emphasizes the laboratory methods used in diagnosis. Dr. Greenblatt was one of the early investigators of diethylstilbestrol, and he devotes considerable space to the findings of his experimental work.

This booklet will be of value to anyone interested in the subject, but especially to those members of our Association who wished to take Dr. Greenblatt's course last fall, but who, for various reasons, were unable to do so.

Paper. Pp 106, with 10 illustrations. Price \$2.00. Published under the auspices of the University of Georgia School of Medicine by the Walton Printing Company, Augusta, Georgia.



University of Florida—School of Pharmacy

BUREAU OF PROFESSIONAL RELATIONS

Mr. James T. Pate, General Superintendent of the Duval County Hospital, recently made known that the Medical Staff of the Hospital has officially designated the Accepted Florida Formulary as the official formulary of that hospital. The Accepted Florida Formulary has been compiled and distributed by the Bureau of Professional Relations of the University of Florida School of Pharmacy, acting under the sponsorship of the Florida Medical Association, the Florida State Pharmaceutical Association, and the Florida State Board of Pharmacy.

The formulary, appearing in the form of a small steep prescription file box, is the same formulary which is now being given without charge to each physician of the state by the Bureau. The Accepted Florida Formulary, so designated, was compiled from a great many hospital formularies throughout the country and from information selected upon the approval of a special committee appointed by the Florida Medical Association. The Interrelationship Committee has worked in close cooperation with the Bureau both in the introductory work of compiling the Formulary and in continual work in an advisory capacity to the Bureau.

The program of the Bureau was created in order to foster a reduction in cost of medication and to reduce self-medication. Today the market is flooded with new proprietary products. Nearly two-thirds of all the products introduced are not recognized by the Council on Pharmacy and Chemistry of the American Medical Association or the U.S.P.

By the use of the official drugs of the U.S.P. as compounded on prescription, the cost of medication to the patient can often be reduced, and the patient is encouraged to seek medical care instead of resorting to self-medication in the belief that he is saving money.

The Accepted Florida Formulary has been compiled to supply to each physician of the state a ready reference to the practical use of U.S.P. products. In the Duval County Hospital the Accepted Formulary will be placed in every ward of the hospital for the benefit of physicians prescribing in the wards and out-patient departments. The formulary will serve to familiarize the physi-

cians with the medicaments available in the hospital pharmacy and is designed for the purpose of encouraging the use of official products in the interest of economy both to the hospital and to the patient.

C. R. J.

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

COURSE AND PROGNOSIS OF HEMORRHAGIC NEPHRITIS IN CHILDREN, GACHET, FRED S., LAKE LAND, AM. J. DIS. CHILD ⁶¹:1175-1192 (JUNE) 1941

Gachet, in a very scholarly paper, records detailed observations concerning the course and prognosis of hemorrhagic nephritis in a series of 188 cases observed between 1926 and 1939.

The cases were studied "by observing the changes in renal function, at short intervals during the acute stage, by trying to correlate the rate of change of renal function during the acute stage with the ultimate outcome of the nephritis and by determining later, when possible, the completeness of recovery from the disease."

The urea clearance test of Möller, McIntosh and Van Slyke as adapted for use with children by McIntosh, Möller and Van Slyke was used after 1931 to determine the level or renal function.

The results of observations in these cases indicated that "one may pick out the cases in which the disease is most likely to become chronic within the first two months of the illness or sometimes even in the first month, by observing the rate of recovery of renal function, as indicated by successive urea clearance tests done at short intervals." If, however, the delay in rise of urea clearance is explained by clinically evident infection or by circulatory failure, the danger of incomplete healing is less than if no such cause for delayed rise can be found.

In 154 of 166 cases of acute nephritis, the patient survived; 103 are considered to have recovered.

Everhart Surgical Supply Co.

493 Peachtree St. N. E.
ATLANTA, GA.

We have been serving the Medical Profession in Florida and Georgia for over a quarter-century, successfully and satisfactorily.

G. I. BUTZER, Florida representative
45 E. WINTER PARK AVE., ORLANDO

We will be glad to see you at the Palm Beach Convention in April — Booth 35

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS

TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

ADVERTISERS' NOTES

ANY PHYSICIAN MAY EXHIBIT "WHEN BOBBY GOES TO SCHOOL" TO THE PUBLIC

Under the rules laid down by the American Academy of Pediatrics, their new educational-to-the-public film "When Bobby Goes to School" may be exhibited to the public by any licensed physician in the United States.

All that is required is that he obtain the endorsement by any officer of his county medical society. Endorsement blanks for this purpose may be obtained on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

Such endorsement, however, is not required for showings by licensed physicians to medical groups for the purpose of familiarizing them with the message of the film.

"When Bobby Goes to School" is a 16-mm. sound film, free from advertising, dealing with the health appraisal of the school child, and may be borrowed by physicians without charge or obligation on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

IMPROVED ARM FOR PROJECT-O-CHART

In cases where American Optical Company's standard floor stand or wall bracket are unsuitable, the Jeter Arm for the AO Project-O-Chart has enjoyed widespread popularity.

Now comes a new and improved model recently designed by Dr. Early Jeter of Nashville, Tenn. This is fully chrome plated and rigidly constructed, thus eliminating all possible vibrations.

The improved Jeter Arm, states AO, is the perfect complement to its DeLuxe Unit. It fits the upright of the Unit snugly and is so constructed that the part holding the Project-O-Chart folds up when not in use.



Dr. Randolph's Sanitarium JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome, H.W.&D.

(dibrom-oxymercuri-fluorescein-sodium)

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

HYNSON, WESTCOTT & DUNNING, INC.
BALTIMORE, MARYLAND

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue every two weeks throughout the year. General Courses One, Two, Three and Six months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course will be offered starting June 1st. Two Weeks Course in Gastro-Enterology will be offered starting June 15th. One Month Course in Electrocardiography and Heart Disease every month, except December and August.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting May 4th. Informal Course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting April 20th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting April 6th. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered starting April 20th. Five Weeks Course in Refraction Methods starting May 11th. Informal Course every week.

ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

MODERN METHODS OF IMMUNIZATION

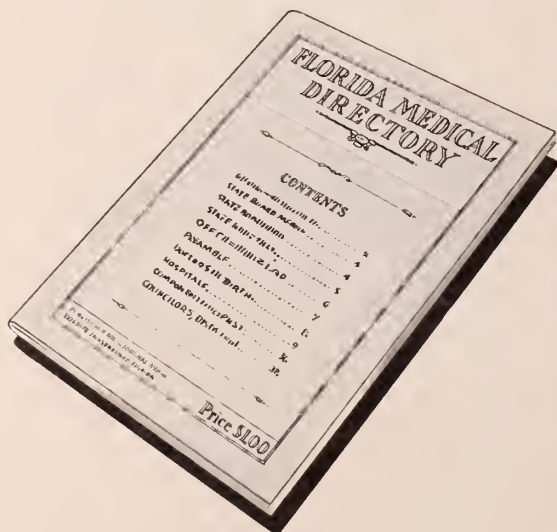
Physicians who are concerned with the immunization of infants and children have as their goal the use of materials which will not sensitize the patient and the utilization of routes of administration that cause least discomfort. Definite assistance toward these objectives is provided by use of combined antigens in the opinion of a recent observer (J. Florida M. A., 28:330, 1942). The author has employed Combined Diphtheria Toxoid-Tetanus Toxoid, Alum Precipitated (Lilly) for the last three years without any untoward reactions.

The combination of diphtheria and tetanus toxoids is effected by mixing suitable amounts of the respective toxins which have been detoxified by the use of formaldehyde, and precipitating from this combination with alum the diphtheria and tetanus toxoids. The individual toxoids are tested for toxicity prior to mixing, and the combined alum precipitated toxoid is tested for toxicity after precipitation. Potency is determined by injecting guinea pigs with a human dose. After four weeks the blood serums of these animals must show at least 2 units of diphtheria antitoxin and 2 units of tetanus antitoxin per cubic centimeter of blood serum.

Should exposure to either diphtheria or tetanus occur before immunization against each disease is completed, the usual procedures for immediate protection of unimmunized subjects should be considered. The combined toxoid is not for treatment, it is a prophylactic measure of active immunization against diphtheria and tetanus.

ANNOUNCEMENT BY PHYSICIANS CASUALTY
ASSOCIATION

In these days when we are all confronted with a question of shortages in various commodities and an increase in the price of those obtainable, we are happy to announce that not only will we continue to carry our policyholders at no increase in the cost of their accident and health insurance, but we have adopted a resolution to the effect that there shall be no restrictions under our policies by reason of Army, Navy or Marine Service and this is irrespective of where such Service may take the policyholder.



1942 DIRECTORY

IS OFF THE PRESS
PLACE YOUR ORDER NOW.
PRICE \$1.00

FLORIDA MEDICAL ASSOCIATION
Box 1018 - - - - JACKSONVILLE, FLORIDA

Child
Nutrition

THE high carbohydrate requirements of healthy children are effectively fulfilled by KARO. It is non-cloying to the appetite, not readily fermented, easily digested, rapidly absorbed and utilized.

Free to Physicians

"Infant Feeding Manual For Physicians" is a concise, helpful monograph containing specific information and tested Karo feeding formulas. Sent postpaid.

Please Write Medical Department
CORN PRODUCTS REFINING CO.
17 Battery Place, New York, N. Y.



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and those suffering from ARTHRITIS also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoye, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle *Funeral Director*

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, President.....*Miami*
 MRS. F. W. KRUEGER, First Vice-President.....*Jacksonville*
 MRS. R. L. CLINE, Second Vice-President.....*Lakeland*
 MRS. PAUL KELLS, Corresponding Secretary.....*Miami*
 MRS. H. A. LEAVITT, Recording Secy. Treas.....*Miami*
 MRS. M. J. FLIPSE, Historian.....*Miami*
 MRS. L. C. INGRAM, Parliamentarian.....*Orlando*

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity.....*Jacksonville*
 MRS. P. J. MANSON, Hygeia.....*Miami*
 MRS. RUPERT STOVALL, Public Relations.....*Ft. Lauderdale*
 MRS. E. M. HENDRICKS, Legislation.....*Ft. Lauderdale*
 MRS. GORDON H. IRA, Finance.....*Jacksonville*
 MRS. T. C. KENASTON, Exhibits.....*Cocoa*
 MRS. CLYDE ANDERSON, Archives.....*St. Petersburg*
 MRS. GEORGE C. TILLMAN, Student Loan.....*Gainesville*
 MRS. F. W. KRUEGER, Program.....*Jacksonville*
 MRS. R. L. CLINE, Organization.....*Lakeland*
 MRS. JOHN H. OWENS, Bulletin.....*Jacksonville*

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B".....*Gainesville*
 MRS. E. W. VEAL, Northeast "C".....*Jacksonville*
 MRS. J. C. GRIFFIN, Southwest "D".....*Tampa*
 MRS. W. C. PAGE, South Central "E".....*Cocoa*
 MRS. HILLARD WILLIS, Southeast "F".....*Coral Gables*

BROWARD COUNTY AUXILIARY

The Broward County Auxiliary in January were entertained at a covered dish luncheon at the home of Mrs. A. B. Connor. Mrs. W. J. Barge, president of the Woman's Auxiliary to the Florida Medical Association, was the guest speaker.

Mrs. Barge emphasized the importance of Auxiliary members cooperating in national defense work, of assisting health agencies with state health problems, and expressed the hope of increasing the membership of the national organization from the present 27,000 to 100,000. She stated that a physician's wife could affiliate with any county auxiliary or hold a membership at large in the National Auxiliary for one dollar. She also encouraged members to subscribe to the National Bulletin for only one dollar a year for four editions and to read the Auxiliary page in the State Medical Journal for further information and help. She announced that the State Medical Convention would be held at Palm Beach April 13, 14, 15, and said that a large delegation from each county is expected. She also announced that the new State Secretary and Treasurer is Mrs. H. A. Leavitt of Miami.

Mrs. Leigh Robinson, president of the Broward County Auxiliary presided at a short business session at which time it was reported that almost a hundred per cent of the members were doing defense work, Red Cross work, knitting

*Allen's Invalid Home***MILLEDGEVILLE, GA.****Established 1890****For the treatment of
NERVOUS AND MENTAL DISEASES****Grounds 600 Acres****Buildings Brick Fireproof****Comfortable****Convenient****Site High and Healthful****E. W. ALLEN, M.D., Department for Men****H. D. ALLEN, M.D., Department for Women***Terms Reasonable**--- in Miami, Florida***SUN-RAY PARK
HEALTH RESORT****ESTABLISHED IN 1928****REGISTERD SANITARIUM**

**With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases**

**Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases**

**Graduate Nursing and Dietetic Staff, Resident
Physician, Complete Physical Therapy, Four
Acres Beautifully Landscaped Grounds, Sports,
Recreations, Occupational Therapy.**

125 S. W. 30th Court, Miami, Florida

THE *Palm Beach Biltmore*

ON BEAUTIFUL LAKE WORTH

PALM BEACH



SITE OF THE

Florida Medical Ass'n Convention

APRIL 12 to 15, 1942

You'll enjoy your stay at this distinguished hotel . . . largest on the Southern Florida Coast, 600 spacious, outside rooms, all with bath, overlook the Atlantic and beautiful Lake Worth.

Guests at the Palm Beach Biltmore have special membership privileges at the Sun

and Surf Club and the exclusive Palm Beach Country Club. Free Aerocar transportation is provided.

During the year, when you have occasion to recommend a *fine* hotel to patients, we will appreciate your suggesting the Palm Beach Biltmore.

SOUTHERN FLORIDA

AT MIAMI—

THE MIAMI BILTMORE
THE RONEY PLAZA

AT PALM BEACH—

PALM BEACH BILTMORE
WHITEHALL

Hotels

ALL SPORTS FACILITIES

FREE AEROCAR TRANSPORTATION

and sewing. Practically every member is taking the first aid course. Mrs. R. H. Stovall, state chairman of Public Relations, reported that the radio programs, "Doctors At Work", sponsored by the American Medical Association, are being broadcast each Saturday at 5:30 p. m. E. S. T. About 15 attended the meeting.

DUVAL COUNTY AUXILIARY

Mrs. Ernest Milam entertained the Woman's Auxiliary to the Duval County Medical Society, at its January meeting in her home on Oak Street.

Mrs. Raymond King, president, announced a new committee for defense work with Mrs. James Borland as chairman. Mrs. Borland reported that a first aid class for doctors' wives would begin Thursday, January 15, in the Roosevelt hotel from 9:30 to 11:30 a. m. She announced that dressings would be made at the Woman's Club on Fridays and that sewing groups would gather materials on Tuesday mornings at the homes of Mrs. Raymond King on Riverside Avenue and Mrs. F. W. Krueger on Arbor Lane. An appeal for support of the Red Cross was made and a very generous donation subscribed.

Mrs. J. D. Ferrara, program chairman, introduced the guest speaker, Licut. Commander George Dufek, who showed colored moving pictures and gave a very interesting account of his trip to the Antarctic continent with the Admiral Byrd expedition in 1938. This expedition was sponsored by the U. S. Navy and the voyage was made on a 66 year old wooden vessel, "The Bear", whose maximum speed was eight knots an hour. He described the health conditions of the party and said that colds were unknown due to the cold, thin, clear air.

During the social hour delicious refreshments were served from a beautifully appointed lace covered table centered with a bowl of bright colored spring flowers and burning tapers. Mrs. Milam was assisted by Mrs. Freddie Richards and Mrs. E. C. Swift. Mrs. Luther Holloway and Mrs. S. R. Norris poured tea and coffee.

About 60 members and guests attended the meeting.

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

An eleemosynary or not-for-profit institution. Well equipped for the individual treatment and management of all types of patients.

Special rates may be arranged for persons in straitened circumstances by correspondence.

AIR CONDITIONED



North Miami Ave. at 79th St.

Telephone 7-1824

Resident and Consulting Neuropsychiatrists

PATRONIZE JOURNAL ADVERTISERS

OUR ADVERTISERS BEAR THE STAMP OF APPROVAL OF THE AMERICAN MEDICAL ASSOCIATION AND ALSO OF THE FLORIDA MEDICAL ASSOCIATION. THEY ARE WORTHY OF THE PATRONAGE OF OUR MEMBERS.

Ambulance Directory

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101

Phone 52101

MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.

MEDICAL WRITING SERVICE

Assists the Medical Author in the Preparation of Scientific Papers

Manuscripts edited	Manuscripts typed for publication
Literature reviewed	Medicolegal subjects summarized
References completed	Public addresses prepared

EDITH B. HILL
Consultant
Terms Reasonable

935 SOUTH OREGON AVENUE
TAMPA, FLORIDA
Telephone H 27-454

convention press

two eighteen west church street
jacksonville, florida

printers
publishers

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association	Walter C. Jones, Miami	Shaler Richardson, Jacksonville....	Palm Beach, Apr. 13-15, 1942
Florida Medical Districts:			
—Northwest	William C. Roberts, Panama City	Stewart Thompson, Jacksonville....	Panama City, 1942
—North Central	Alva T. Cobb, Gainesville.....	" " "	Ocala, 1942
—Northeast	Maximilian Stern, Daytona Beach	" " "	Jacksonville, 1942
—Southwest	Howard V. Weems, Sebring	" " "	Sarasota, 1942
—South Central	Carl D. Hoffmann, Orlando.....	" " "	Cocoa, 1942
—Southeast	Robert L. Elliston, Ft. Lauderdale	" " "	Miami, 1942
Alabama Medical Association.....	Samuel A. Gordon, Marion.....	D. L. Cannon, Montgomery.....	April 21-23, 1942
Georgia, Medical Assn. of.....	Allen H. Bunce, Atlanta	E. D. Shanks, Atlanta.....	Augusta, Apr. 28-May 1, 1942
Florida—			
Section, Am. College Phys.	W. W. George, W. Palm Beach....	Kenneth Phillips, Miami.....	Palm Beach, Apr. 12-13, 1942
Dental Society, State.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	
Term. and Syph., Soc. of.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville	Palm Beach, Apr. 12-13, 1942
East Coast Medical Association....	T. C. Kenaston, Cocoa	I. M. Hay, Melbourne.....	Melbourne, 1942
Hospital Association.....	Mr. Ernest G. McKay, Tampa....	Mr. R. L. Martin, St. Petersburg.....	Tampa, June 13, 1942
Industrial Surgeons, Assn. of	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	Palm Beach, Apr. 12-13, 1942
Medical Postgraduate Course	Turner Z. Cason, Jacksonville.....	Chairman	Jacksonville, June 22-27, 1942
Nurses Association, State.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine	Orlando, November, 1942
Ophthal. & Otol., Soc. of	S. B. Forbes, Tampa	C. E. Dunaway, Miami.....	Palm Beach, Apr. 12-13, 1942
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	Palm Beach, Apr. 12-13, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach.....	Palm Beach, Apr. 12-13, 1942
Pharmaceutical Association, State	Mr. Emmett L. Brown, Palatka....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May, 1942
Public Health Association	W. H. Pickett, Jacksonville.....	Lloyd N. Harlow, Jacksonville.....	
Radiological Society	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	Palm Beach, Apr. 12-13, 1942
Railway Surgeons' Association....	J. W. Alsobrook, Plant City.....	W. C. Page, Cocoa	Palm Beach, Apr. 12-13, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	
Tallahassee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
West Coast Clinical Society.....	G. G. Oswald, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
West. Sec., Am. Cong. Phys. Ther....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	Memphis, May, 1942
Southeastern Surgical Congress.....	Irvin Abell, Louisville.....	B. T. Beasley, Atlanta.....	Atlanta, Mar. 9-11, 1942
Southern Medical Association.....	M. Pinson Neal, Columbia, Mo....	Mr. C. P. Lorz, Birmingham	Richmond, November, 1942
Spannee River Medical Society....	L. J. Arnold, Jr., Lake City	T. H. Bates, Lake City	

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	M. F. Parker, M.D. Panama City	W. C. Roberts, M. D. Panama City		10	9	A-1-'42 W. C. Roberts, M.D. Panama City
	Escambia *Santa Rosa	A. L. Stebbins, M.D. State Bd. of Health Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P. M.	51	41	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P. M.	6	100%	
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		6	100%	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahatchka	J. R. Norton, M.D. Port St. Joe	3rd Tuesday Odd Months	5	3	A-2-'43 C. D. Whitaker, M.D. Marianna
	Jackson *Calhoun	W. R. Wandek, M.D. Marianna	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P. M.	10	7	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	G. H. Garmany, M.D. Tallahassee	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P. M.	39	30	
B	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P. M.	11	100%	B-3-'43 J. M. Price, M.D. Live Oak
	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	1	
	Taylor *Dixie, Lafayette	J. C. Ellis, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P. M.	5	100%	
	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	A. T. Cobb, M.D. 331 W. University Ave. Gainesville	2nd Wednesday 7:30 P. M.	30	16	B-4-'42 Alva T. Cobb, M.D. Gainesville
	Marion *Levy	B. S. Stutts, M.D. Anderson Bldg. Dunnellon	T. Hartley Davis, M.D. 202 Commercial Bank Ocala	3rd Thursday 12:30 P. M.	26	9	
	Pasco-Hernando- Citrus	J. T. Bradshaw, M.D. San Antonio	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P. M.	15	8	
	Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P. M.	188	146	C-5-'43 L. Y. Dyrenforth, M.D. Jacksonville
C	St. Johns	W. D. Webb, M.D. 220 St. George St. St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P. M.	12	100%	
	Putnam	J. Worth Brantley, M.D. Grandin	Allen P. Gurganious, M.D. Palatka	2nd Tuesday Even Months 7:00 P. M.	10	6	C-6-'42 Maximilian Stern, M.D. Daytona Beach
	Volusia *Flagler	W. C. Pay, M.D. 221 W. Rich Ave. DeLand	R. L. Miller, M.D. 258½ S. Beach St. Daytona Beach	2nd Tuesday 7:30 P. M.	45	23	
	Hillsborough	B. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P. M.	104	75	D-7-'43 John R. Boling, M.D. Tampa
	Manatee	L. W. Blake, M.D. Bradenton	M. M. Harrison, M.D. Professional Bldg. Bradenton	3rd Tuesday 7:00 P. M.	14	100%	
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P. M.	102	101	
	Sarasota		Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P. M.	17	2	
D	DeSoto-Hardee- Highlands-Char- lotte-Glades	L. W. Martin, M.D. Sebring	G. H. McSwain, M.D. Arcadia	2nd Tuesday 8:00 P. M.	19	11	D-8-'42 H. V. Weems, M.D. Sebring
	Lee *Collier, Hendry	Harvie J. Stipe, M.D. 312 Pythian Bldg. Fort Myers	A. Louis Girardin, M.D. 309 Pythian Bldg. Fort Myers	3rd Tuesday 7:30 P. M.	17	14	
	Polk	J. R. Boulware, M.D. Box 367 Lakeland	Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P. M.	61	7	
	Brevard	G. T. von Colditz, M.D. Route 1 Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	9	E-9-'42 Carl D. Hoffmann, M.D. Orlando
	Lake *Sumter	Louis R. Bowen, M.D. Box 905 Eustis	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P. M.	17	2	
	Orange *Osceola	Spencer A. Folsom, M.D. 319 Exchange Bldg. Orlando	E. E. Hitchcock, M.D. 7 E. Colonial Dr. Orlando	3rd Wednesday 8:30 P. M.	88	51	
	Seminole	C. L. Park, M.D. 515 1st Nat. Bank Bldg. Sanford	O. L. Barks, M.D. Sanford Clinic Sanford	2nd Monday 7:00 P. M.	12	1	
E	St. Lucie-Okeech- hee-Indian River- Martin	R. C. Boothe, M.D. Box 408 Ft. Pierce	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P. M.	18	15	E-10-'43 E. B. Hardee, M.D. Vero Beach
	Broward	Elbert McLaury, M.D. 210 Hollywood Bk. Bldg. Hollywood	O. C. Brown, M.D. 915 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P. M.	38	35	F-11-'42 R. L. Elliston, M.D. Ft. Lauderdale
	Palm Beach	James R. Sory, M.D. 616 Harvey Bldg. W. Palm Beach	D. W. Martin, M.D. 618 Comeau Bldg. W. Palm Beach	4th Monday 8:00 P. M.	69	47	
	Dade	Thomas O. Otto, M.D. 704 Huntington Bldg. Miami	Herbert Eichert, M.D. 537 duPont Bldg. Miami	1st Tuesday 8:30 P. M.	337	61	F-12-'43 W. Duncan Owens, M.D. Miami Beach
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P. M.	5	100%	

Since 1860



Pharmaceutical Preparations

For eighty-two years John Wyeth and Brother have been manufacturing quality pharmaceuticals. During this period the integrity of the physician's prescription has been maintained by a policy of strict ethical promotion. Wyeth products are not known to the laity. Emphasis is placed on research and production control so that standardized potency and therapeutic effect are always obtained when the physician writes "Wyeth's."

The name Wyeth's is Reg. U. S. Pat. Off.

John Wyeth and Brother, Inc., Philadelphia

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

*a natural
source
of*

VITAMIN B₁
VITAMIN G



and other known factors of the
VITAMIN B COMPLEX
including nicotinic acid

MEAD'S BREWERS YEAST TABLETS • Each Mead's Brewers Yeast Tablet contains 20 International units of vitamin B₁ (thiamin—the antineuritic factor) and 20 Sherman units of vitamin G (riboflavin). Clinical tests have shown the product to be rich also in nicotinic acid, for the prevention and treatment of pellagra. Supplied in 6-grain tablets in bottles of 250 and 1,000.

MEAD'S BREWERS YEAST POWDER • Each gram (½ teaspoon) supplies 50 International units of vitamin B₁ and 50 Sherman units of vitamin G (the same potency as Mead's Brewers Yeast Tablets), as well as nicotinic acid. Mixes readily with various vehicles the physician may specify in infant feeding. Supplied in 6-oz. bottles.

*Mead's Brewers Yeast is nonviable and is vacuum-packed to prevent oxidation.
Packed in brown bottles and sealed cartons for greater protection.*

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U. S. A.

NEW YORK ACADEMY OF

2

MEDICINE

2 E 103RD ST

The JOURNAL of the Florida Medical Association, Inc.

Vol. XXVIII

APRIL, 1942

No. 10

CONTENTS

THE N.Y. ACADEMY
OF MEDICINE
MAY -4 1942
LIBRARY.

The Role of the Physician in Defense, Gilbert S. Osincup, M. D., Orlando.....	475
Mechanism of Neurologic Symptoms Applicable to General Practice, W. C. McConnell, M.D., and W. H. McConnell, M.D., St. Petersburg	477
Nephritis in Children as Observed in Florida, Hillard W. Willis, M.D., Coral Gables.....	480
The Hospital and the National Emergency, Capt. Lucius W. Johnson, Pensacola	484
Aminophylline in Cheyne-Stokes Respiration, D. G. Stannus, M. D., and C. Frederic Roche, M.D., Miami Beach.....	489
Sterility in Man, Perry D. Melvin, M.D., Miami	491
Editorials: Annual Convention; Words	495
Marriages and Deaths.....	496
State News Items	496
Medical Postgraduate Course.....	497
Component County Societies	498
Abstract Department	500
Bureau of Professional Relations.....	500
Advertisers' Notes	502
Woman's Auxiliary	504

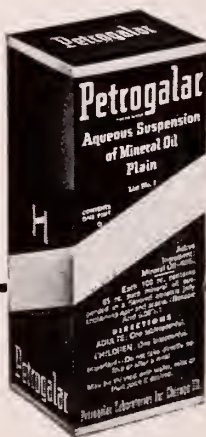


LET'S GO! DOUBLE TIME

• The Army's carefully planned routine soon enables the rookie to put in a full day at "double time" without ill effects. But for the civilian "double time" living often results in faulty health habits which you as a physician are called upon to correct.

When constipation exists consider the advantages of Petrogalar* as an aid in the restoration of normal bowel movement. Its pleasant taste and gentle, consistent action are acceptable to even the "fussiest" patients.

Petrogalar is available in five different types to afford a choice of medication best suited to the individual patient.



FOR THE TREATMENT OF CONSTIPATION

Petrogalar



*Reg. U. S. Pat. Off. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 65 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.

Petrogalar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



Highly practical **for INFANTS and CHILDREN**

INCORPORATING the daily dose of vitamin D in milk removes some difficulties in administration. The mother merely needs to add the prescribed dose to the daily ration of milk. Moreover, biologic and clinical investigations have shown that when vitamin D is thoroughly diffused in milk smaller doses may suffice for the prevention and cure of rickets.

Drisdol in Propylene Glycol makes it possible to secure the benefits obtainable from combining vitamin D with the daily milk ration. Unlike oily preparations, Drisdol in Propylene Glycol diffuses readily in milk and when well diluted imparts no taste nor odor.

HOW SUPPLIED:

Drisdol in Propylene Glycol—10,000 U.S.P. units per gram—is available in bottles containing 5 cc. and 50 cc. A special dropper delivering 250 U.S.P. vitamin D units per drop is supplied with each bottle.



DRISDOL

Reg. U. S. Pat. Off. & Canada

Brand of CRYSTALLINE VITAMIN D
from ergosterol



IN PROPYLENE GLYCOL

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.

WINDSOR, ONT.

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla.

Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924



BRAWNER'S SANITARIUM

Established 1910

SMYRNA, GEORGIA
(Suburb of Atlanta)

*For Nervous and Mental Disorders
Drug and Alcohol Addiction.*

Approved diagnostic and therapeutic methods.

Metrazol and Electro-shock in selected cases.

Special Department for General Invalids and Senile Cases at Monthly Rates

JAMES N. BRAWNER, M.D., Medical Director
ALBERT F. BRAWNER, M.D., Department for Men
JAMES N. BRAWNER, JR., M.D., Department for Women.

California WINES *invite attention*

IN AMERICA TODAY, the wines of our own country are used nine to one over foreign wines.

Especially favored are the wines of California. For in the opinion of authorities qualified to speak, California is producing wines of outstanding quality.

This quality begins with the grapes themselves. For example, in California's 700-mile vineyard belt there occurs a range of soils and climates in which the world's finest wine grapes are grown. Somewhere in the state each grape variety finds its ideal setting and comes to perfect ripeness each year.

Just as essential, American wine-growing skills and facilities have now advanced over any before known in this country. Special methods of grape selection, temperature control, and sanitation, continuing laboratory tests, and spotless modern equipment today aid the wine grower in the United States.

In every way California wines conform to the most rigid state and Federal standards of quality. All are well developed. True to type.

And these fine wines are moderate in price—perhaps an important point to many people who now find wines of Europe too expensive.



This advertisement is printed by the wine growers of California acting through the Wine Advisory Board, 85 Second Street, San Francisco. The non-profit Wine Advisory Board invites your requests for further information about California wines.

Only One
Pair of
Feet



in the World
Could make
These
Prints



No other footprints are exactly the same as those of this newborn infant. And no other oxytocic product duplicates Pitocin,* which helped bring this baby into the world. Pitocin contains the oxytocic principle of the pituitary gland with almost none of its pressor principle. Thus, it effectively stimulates uterine contractions without raising the blood pressure . . . an especially useful factor when labor is complicated by such conditions as nephritis and hypertension.

Pitocin is a familiar product in most delivery rooms. Obstetricians are pleased with its oxytocic reliability, its speedy action, the rarity of systemic reactions following its use. The Parke-Davis label assures accurate standardization.

Chief indications for Pitocin (alpha-hypophamine) are: medical induction of labor; stimulation of the lagging uterus during labor; prevention and minimizing of postpartum or late puerperal hemorrhage; and of blood loss following cesarean section or curettage. Literature on request.

Trade Mark Reg. U. S. Pat. Off.

PITOCIN

A product of modern research offered to the medical profession by

PARKE, DAVIS & COMPANY DETROIT, MICHIGAN
OVER 75 YEARS OF SERVICE TO MEDICINE AND PHARMACY

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

The Middle Way

..... IN BISMUTH THERAPY

BISMUTH ETHYLCAMPHORATE

After the intramuscular injection of 2 cc. of Bismuth Ethylcamphorate, a treponemicidal level is ordinarily reached in forty-eight to seventy-two hours. This speed of effectiveness lies between that of water-soluble bismuth salts, which are faster, and oil suspensions of bismuth salts, which are slower. Since this promptness of therapeutic action is coupled with good duration of effectiveness, Bismuth Ethylcamphorate possesses the advantages of the "middle way."

Sterile Solution Bismuth Ethylcamphorate is the bismuth salt of ethyl camphoric acid dissolved in sweet almond oil. It is available in boxes of six and twenty-five 1 cc. ampoules, and in 30 cc. vials.



Fine Pharmaceuticals Since 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

28% LESS NICOTINE IN THE SMOKE—BUT NO REDUCTION IN SMOKING PLEASURE

WHEN improving a patient's smoking hygiene, many a physician simplifies his program by advising the regular use of Camel cigarettes—the slower-burning brand. Medical-research authorities* state, and Camel's scientific tests on hundreds of samples** confirm, that a slower-burning cigarette produces less nicotine *in the smoke*.

Nicotine, as the body of scientific research agrees, is by far the leading component of tobacco smoke having systemic potentials.

Slower-burning Camels not only offer a reduction of nicotine in the smoke but assure your patients of more mildness, coolness, and flavor. Naturally, your recommendation of Camel cigarettes helps to promote patients' cooperation.

*J.A.M.A., 93:1110—October 12, 1929

Brückner, H—Die Biochemie des Tabaks, 1936

**The Military Surgeon, Vol. 89, No. 1,
p. 7, July, 1941

CAMEL

THE CIGARETTE
OF COSTLIER TOBACCOS



● In recent laboratory tests, Camels showed 28% less nicotine *in the smoke itself* than the average of the 4 other largest-selling brands tested—less than in the smoke of any of them. In the same tests, Camel burned 25% SLOWER than the average of the 4 other largest-selling brands tested—slower than any of them.

SEND FOR a reprint of the most important medical article on smoking in modern times—written by an outstanding physician—and reprinted from The Military Surgeon, July, 1941. Write today for this highly informative analysis. Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

Name _____

Address _____

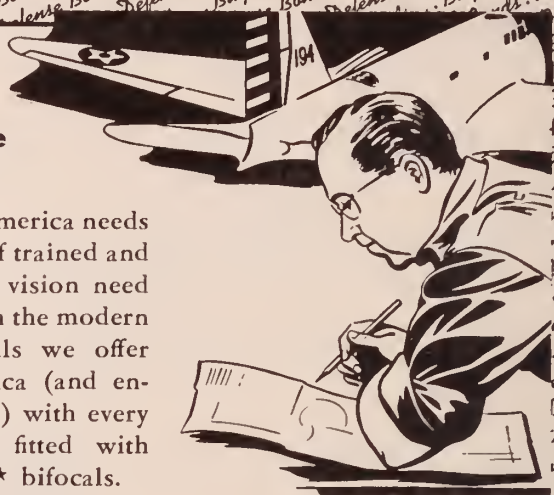
City _____ State _____

Old Eyes Find New Usefulness in the Defense of America

More than ever before, America needs the productive capacity of trained and skilled men. And aging vision need be no handicap—not with the modern Bausch & Lomb bifocals we offer today. You serve America (and enhance your own prestige) with every pair of eyes properly fitted with Panoptik* or Orthogon* bifocals.

*In Soft-Lite, too.

The SOUTHEASTERN OPTICAL CO., Inc.
distributors of **BAUSCH & LOMB** products



.... in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928

REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician, Complete Physical Therapy. Four
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Site High and Healthful

E. W. ALLEN, M.D., Department for Men
H. D. ALLEN, M.D., Department for Women

Terms Reasonable

What better proof of Philip Morris superiority:—

EVEN *more* conclusive than the obvious improvement in patients' conditions* on changing to PHILIP MORRIS cigarettes is this:

**ON CHANGING BACK TO
OTHER CIGARETTES,
CONGESTION RETURNED
IN 80% OF THE CASES.****



PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.

119 FIFTH AVENUE, NEW YORK, N. Y.

* Irritation of the nose and throat due to smoking.

** Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154.



THE ART OF DOING THINGS WELL

LILLY LABELS are *stamped by hand* to provide the all-important control number. Machine stamping is faster and cheaper, but on this job machines cannot match the accuracy of sharp eyes and nimble fingers. Without the number which identifies its lot, an ampoule, a bottle of tablets, or a box of suppositories is an orphan without family record. A Lilly product without means of positive identification is considered unfit for use.



Eli Lilly and Company

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U.S.A.

THE ROLE OF THE PHYSICIAN IN DEFENSE

GILBERT S. OSINCUP, M.D.
ORLANDO

The part the medical profession will play in defense efforts is vastly different from that which it played in the last, or any previous war. During the last war large numbers of physicians were taken from private practice for service in the armed forces, and their removal placed a great additional burden on those who were left. They participated in the examination of the draftees and were paid a small fee for their services. Since the inception of the Selective Service, almost eighteen months ago, physicians have been examining all selectees and have received for that examination no remuneration. The physicians of Florida have done a better job than those of other states. The percentage of rejections in this state is lower than in any other. This fact speaks well for the conscientiousness with which they have performed their duty. It is unfortunate that little publicity has been given the fact that these physicians are donating their services, for it is generally understood by the public that they are being paid.

War as it is waged today creates for the medical profession a different problem than hitherto, as has been amply demonstrated in England. Civilians, as well as members of the armed forces, become casualties in large numbers and they must be cared for. In the British Isles today, all members of the medical profession are in the employ of the government, and there is virtually no private practice. It is unlikely that among the citizens of the United States, or Florida, there will be casualties on such a large scale as occurred among the civilian population in Great Britain, but we are faced with the possibility of casualties occurring in so-called defense areas as a result either of subversive activities or of attack by external forces. We must prepare for any eventuality, not knowing from which direction it may come. It seems certain that we will become directly involved in war in the near future, and if we neglect to protect ourselves, or to make arrangements for the care of any number of casualties, we shall be grossly negligent.

In Florida, the State Defense Council was

organized almost a year ago, by appointment of the governor. It met first in November and was told at that time that it had four months in which to complete its organization. Apparently the government felt that we would be engaged in war by the middle of 1941. Upon recommendation from Washington, the legislature passed a law creating the State Defense Council and empowering it to do everything necessary to protect the civilian population of the state of Florida. It is empowered to command the cooperation of any and all governmental agencies in carrying out this mandate. The Council is set up in a number of divisions, which cover all phases of civilian life. Each division is headed by a chairman. The governor of the state is the chairman of the Council, and an executive director carries out the instructions of the body.

One of the divisions of the Council is the Division of Health and Housing, under which come all activities having to do with the medical profession. The division has been divided into several sections, one of which is medical service. For each of these sections an advisory committee has been named, consisting of one outstanding physician from each of the five congressional districts of the state. The advisory committee for the section of medical service has had several meetings and has recommended such procedures as its members feel are necessary to carry out the duties assigned to it. Each member has recommended a chairman of the section of medical service for every county and local defense council in his district. As with the advisory committees, the local county chairman has been appointed by the governor and he serves as the chairman of the Division of Health and Housing of the county or local defense council. Under this chairman in addition to the section of medical service there are ten other sections. They are as follows:

Hospital Administration: This section is made up of all hospital administrators in the county or local area. It is their duty to see that hospitals are informed as to what measures they must take in case of a major disaster. They include blackouts, removal of all patients who can be moved to other buildings in order to clear beds for casualties, the establishment of operating rooms in basements, arrangements for emergency lighting and other provisions.

Drugs and Supplies: This group must determine the amount of necessary drugs, serums, vaccines, splints, bandages and other supplies on hand and where they are. It is its duty to see that these supplies do not fall below a certain required minimum in any county.

Nursing Service: This section is composed of all nurses in the county or area, and it is the duty of its members to enroll as many retired nurses as possible. They will be assigned to hospitals, aid posts and such other places as may be necessary.

Housing: This group is to make a survey of all available buildings for use as emergency hospitals and first aid posts. Rooms for storage of materials, blankets, stretchers and other supplies are to be selected.

Disposal of Bodies: This section is to be made up largely of undertakers, and they are to be prepared in case of a major disaster to arrange for proper identification and disposal of the dead.

Establishment of Blood Banks: This section is to promote the establishment of blood banks in each of the five congressional districts. A blood bank has been established independently in this district.

Public Health and Sanitation: This group is charged with putting into effect those recommendations which will be made from time to time by the state Council in connection with the protection of the health of the public.

Dental Health: This section is set up to aid and assist in all ways possible in connection with the dental health of the civilian.

Decontamination Corps: This group is to be trained to take charge of decontamination in the remote event of gas attacks.

Ambulance Service: This section is to provide ambulances, mostly of a temporary nature, such as station wagons and converted laundry trucks.

All of these sections are under the direction of the chairman of the Division of Health and Housing, and he is directly responsible for them. In addition, he is the supervisor of the medical service section, the key position among them all, for under his direction come the operation of aid posts and mobile and first aid units, the organization of operating teams and all necessary measures for the care of the injured.

Each county in the state has set up a county defense council following the same setup as in the

state Council. It has the same divisions and same sections. In some cases, there have been set up local councils, which again follow the same plan of organization in regard to divisions and sections. These local councils have been organized in counties too big for one organization to work well and in areas where the population is so dense that it seemed unwise to have only one council charged with the entire responsibility.

On the shoulders of the local chairman of the Division of Health and Housing rests the responsibility of seeing that the work is actually performed. He is to carry out the instructions of the local and county councils as they are relayed to him from the State Defense Council. Bulletins go out to him from time to time advising him as to what steps should be taken in organizing the division, and when one considers that there are twelve sections in the division, it is easy to see what a staggering job he has undertaken. As always, however, the physicians who have been asked to undertake this task have been almost 100 per cent willing to assume the burden. When one remembers that all of this work is done on a volunteer basis, it is apparent that the sacrifice involved is indeed great.

It seems likely that as a result of all this organization for the care of the civilian population, the bogie of state medicine will rear its ugly head. As has been stated before, in England all the medical profession is now under the control of the government, and this plan is now being undertaken in a small way by our government. This trend is evidenced by the recent pronouncement that selectees who have been refused for military service or have been deferred because of physical handicaps, will be treated and rehabilitated at the expense of the government. Hospital and medical insurance is being recommended to large groups of civilians. All these straws tend to show which way the wind is blowing. When the statement is made, which is true, that the health and well-being of the civilian population is the concern of the government in connection with national defense, there is no denying it, and when the further statement is made that the distribution of medical care is not perfect, there is no denying that. What then are we to do if we are to forestall the attempt of the government to take over medical protection? I believe that if we give full cooperation to the setup as it is now organized and that if we can promulgate a plan whereby we are able to insure

adequate medical care to all persons, we will be allowed to guide, or at least greatly influence, the trend toward state medicine.

All of us should do our outmost to participate to the fullest extent of our ability in the present national defense program. From present indications, the representatives of our profession are going to do just that. So far everyone who has been asked to participate has done his best. If this cooperation continues, and I am confident that it will, I firmly believe that therein lies the secret of continuing the practice of medicine under our control.

300 E. Colonial Drive.



MECHANISM OF NEUROLOGIC SYMPTOMS APPLICABLE TO GENERAL PRACTICE

W. C. McCONNELL, M.D.

AND

W. H. McCONNELL, M.D.
ST. PETERSBURG

Neurologic terminology is confusing unless it is used frequently. A brief review of neuroanatomy and neurophysiology will help to fix in one's mind certain syndromes. Symptoms identified in general practice are mostly of motor and sensory origin. Discussion of these symptoms follows. The little story of the German picking hops is better remembered than the order of sequence of the cranial nerves. The general relationship of motor and sensory areas and tracts may be remembered by the designation for amperes, anterior motor and posterior sensory.

Destructive lesions of the central motor nerves cause irritation at first, which results in hypotonia of the muscles and diminished reflexes. After a month or six weeks, the symptoms change to hypertonia or spasticity, and the deep reflexes become hyperactive. The Babinski sign, clonus and the atrophy of disuse appear. If a patient presents the latter symptoms while in coma from hemiplegia, intraventricular hemorrhage should be suspected and a poor prognosis given.

Destructive lesions of the roots of the anterior or motor horns of the spinal cord cause increased deep reflexes and hypertonia of the muscles for a few hours. The symptoms, however, change early to flaccid muscles, a considerable de-

gree of paralysis, abolished deep reflexes, great vasomotor disturbance and the atrophy of degeneration. Symptoms are limited to the part of the body supplied by the diseased horns. Infantile paralysis is an example of acute disease of the anterior horns of the spinal cord.

The central motor system is composed of tracts that arise in the brain. Those that arise in the prerolandic area of the cortex are known as pyramidal tracts; those that arise from the basal ganglions are known as extrapyramidal tracts. The peripheral motor nerves arise in the roots of the anterior horns of the spinal cord.

The pyramidal tracts descend through the anterior two thirds of the posterior limb of the internal capsule to the cord. One tract decussates or crosses the midline low in the medulla to be continued in the lateral column of the cord. This is the crossed or lateral pyramidal tract. The other is in the anterior column of the cord. It does not decussate and is the direct or anterior pyramidal tract. At each spinal segment, some fibers depart from each pyramidal tract to form a synapse with cells of the anterior horns at the level of each spinal segment. Those from the direct tract cross the anterior white commissure of the cord to the contralateral horn.

Among the extrapyramidal motor tracts, the rubrospinal, tectospinal and vestibulospinal tracts are probably the most important. The rubrospinal tract decussates after leaving the red nucleus from which it arises and passes down the lateral column of the cord. The tectospinal tract arises in the roof of the midbrain and decussates at the caudal end of the aqueduct of Sylvius to pass down the anterior column of the cord. The vestibulospinal tract has its origin in Deiters' nucleus in the medulla. It descends the lateral column of the cord to form a synapse with the roots of the contralateral anterior horn. Its fibers behave much like those of the anterior pyramidal tract.

It is evident by the great variation of origin and decussation of motor tracts that complete paralysis is impossible except by complete destruction of the cord. In that event the symptoms would be present only below the area cut. It is further to be recalled that one axis cylinder transmits impulses from the brain cell to the anterior horn.

Sensory impulses are received from peripheral sensory nerves into the roots of the posterior horns of the cord. They are passed upward by relay

rather than by a continuous axis cylinder from the horn of the cord to the brain.

Fibers passing upward in the posterior tracts of the cord end at the nucleus gracilis and the cuneate nucleus in the medulla. Fibers, called the fillet, convey sensory impulses from these nuclei to the thalamus. The fillet decussates above the nuclei of origin. Impulses are further transmitted from the thalamus by the thalamocortical tract running through the posterior part of the internal capsule. They go to the postrolandic area of the cortex.

In addition to the posterior tracts of the cord, the anterior and lateral spinothalamic tracts convey impulses in the lateral columns of the cord. They receive impulses from short fibers in the gray matter of the cord that arise in the contralateral posterior horns. The tracts themselves do not decussate. They end in the thalamus.

Tactile sensibility is conveyed by all sensory tracts. Sensibility to pain and temperature is conveyed by the spinothalamic tracts. Deep sensibility is conveyed by the posterior tracts.

Lesions of the cauda equina are hard to locate because they are below the cord structure and symptoms are of the type associated with the peripheral nerves. Roentgen studies, with or without the use of iodized oil or air, are almost always necessary for identification of caudal lesions. Negative findings are no assurance of normality. Iodized oil is painful. We have discontinued its use and now prefer to ask an orthopedic surgeon to explore when in doubt.

Before discussing the spinocerebellar tracts, we shall mention methods of testing by tools in every practitioner's bag. The bowl of a stethoscope makes an excellent percussion hammer. A piece of cotton or a corner of a sheet serves to test tactile sensibility. A pin may be used to test pain. Spoons removed from warm and cool water enable one to elicit sensibility to temperature. Deep sensibility may be tested by the position of joints or motion of parts without visual help. The tuning fork is the polite means, but it is rather an unnecessary instrument for general practice.

Two spinocerebellar tracts course the periphery of each lateral area of the cord. The anterior or indirect cerebellar tract leads upward to a point near the thalamus. It then bends downward and backward to reach the cerebellum by way of the superior cerebellar peduncle. The

lateral or direct cerebellar tract passes upward to enter the cerebellum through the inferior cerebellar peduncle.

Three groups of efferent fibers leave the cerebellum. The cerebellifugal group goes by way of the superior cerebellar peduncle to the red nucleus and the thalamus respectively. The cerebellipedal tract transverses the inferior peduncle to Deiters' nucleus. This nucleus was mentioned as the origin of the vestibulospinal motor tract. It further receives fibers from the internal ear and extraocular nuclei. It is an important reflex nucleus to maintain balance.

The chief function of the cerebellum is the regulation of movement and posture. This is done through the cerebrospinal apparatus. Function, after acute lesion of the cerebellum has occurred, is generally regained because the cerebrum assumes the function no longer exercised by the cerebellum.

In contrast to ataxia of the posterior column, the ataxia of cerebellar disease is constant with the eyes open or closed. Because of the proximity of the cerebellum to the pons and medulla, most cerebellar symptoms are masked by pressure on other structures.

Among the symptoms of cerebellar disease is pendular knee jerk. This appears when the leg hangs free and the tendon is struck. The leg oscillates a number of times before coming to rest. Another symptom is the inability to judge the weight of objects held in the hands. Past pointing, ataxia, vertigo, nystagmus, hypotonia and exaggerated postural reflexes are suggestive of cerebellar lesions. Intense constant occipital headache is present in tumor formation. The pain may radiate to the upper part of the back. Cerebellar ataxia may be imitated by tumor of the frontal lobe through stimulation of the frontopontocerebellar tract.

All but the first and second cranial nerves have their peripheral nuclei in numerical order from the upper part of the pons to the lower portion of the medulla. The nerves run from their respective nuclei towards the base of the brain. The trochlear nerve is the only one that has a posterior exit. Also, it is the only one that has complete decussation. The cortical fibers of the other nerves decussate. All nerves of the brain stem except the fourth emerge on the side from which they take origin. The seventh or facial nerve has both uncortical and bicortical central innervation. The frontal fibers of the seventh

nerve and all the fibers of the ninth, tenth, eleventh and twelfth nerves have upper neurones supplying respective nuclei from both sides of the cerebrum; that is, they have bicortical innervation. Lesions of one upper motor neurone of nerves with bicortical innervation cause minor symptoms. Major symptoms are present when a nucleus is destroyed. Lesions above the nucleus of nerves with unicortical supply cause paralysis in great degree, but without atrophy of muscles.

Hemiplegia is due in most cases to hemorrhage, thrombosis, or embolus. Lesions in the internal capsule cause paralysis contralaterally. No fibers are decussated. Cranial nerves with bicortical supply suffer little. Lesions of the brain stem result in alternating paralysis. The paralysis of the cranial nerve involved is on the side of the lesion and that of the body is on the side opposite to the lesion. The fourth nerve is of course excluded. The other nerves do not decussate after leaving the nucleus of origin.

Destruction laterally of one half of one or more segments of the cord produces symptoms known as the Brown-Séquard syndrome. Segments below the one or ones injured are centrally innervated by the anterior pyramidal and the vestibulospinal tracts of the uninjured side. They do not decussate prior to reaching the segment of the cord to which their fibers depart. The powerful crossed pyramidal, the rubrospinal and tectospinal tracts on the side involved have been severed. Destruction, therefore, of one half of the cord laterally causes homolateral motor paralysis that is pronounced but incomplete. There is vasomotor paralysis because of interruption of the vasomotor fibers passing down the lateral column. There is disturbance of sensibility with ataxia due to section of the posterior tract or tracts. Early hyperesthesia to touch is due to cells of the posterior horns interpreting the sensory impulses of touch as those of pain and sending the impression through the short fibers that lead to the spinothalamic tracts of the other side of the cord. Symptoms of the cutting of the anterior and lateral cerebellar tracts are masked by lack of reflex through severed motor tracts. There is disturbance of the sensibility to pain and temperature contralaterally, due to destruction of the spinothalamic tracts.

The initial lesion in amyotrophic lateral sclerosis is an irritation of the nuclei of the anterior horns of the upper portion of the cord or

of the nuclei of the bulb. Fibrillation, therefore, is an early symptom. It is followed by atrophy of the hands which gives them a clawlike appearance. The deep reflexes are diminished or lost in the arms. At this stage, the case assumes some of the characteristics of a spinal muscular atrophy or chronic poliomyelitis. Involvement of the pyramidal tracts follows. When they are involved, the deep reflexes, even in the atrophic arms, become hyperactive. The lower extremities give evidence of hypertonia or spasticity. The disability presents a phenomenon indicative of joint involvement of the anterior horns and the pyramidal tract. The sensory apparatus escapes injury as a rule.

Syringomyelia begins as a gliosis about the central canal of the cord or bulb. If there is pain, it is of a burning character. There is early loss of sensibility to pain and temperature of the parts supplied by the segments involved. This loss is due to destruction of the short fibers in the gray matter leading to the spinothalamic tracts, and it is bilateral. The sense of touch is retained at this time. This phenomenon is called the dissociation symptom. The initial area of inflammation is replaced by cavitation, which extends to involve the anterior horns with resulting symptoms of early irritation and later motor paralysis. With paralysis, there are atrophy and trophic disturbances. The syrinx may spread irregularly to destroy other tracts or other segments.

The pathologic development of tabes begins with a mild inflammation of the posterior spinal ganglions, ganglionic roots and meninges. The disease then selects the posterior columns and rarely involves other columns. It does not invade the gray matter as a rule. By reason of involvement of the posterior roots and spinal ganglions, pain is an early symptom. The inflammation probably involves the sympathetic rami and causes the visceral pain. Without destruction of the spinothalamic tracts, recurrent attacks of pain do not abate. Because the posterior columns are involved, deep sensibility is diminished or lost, and ataxia and loss of sensibility to the tuning fork result. Loss of the knee jerk is due to the fact that the posterior root forms the afferent arm of the reflex arc. The optic and extraocular nerves are commonly affected. Degeneration of the optic nerve is persistent. Paralysis of the extraocular nerves is fleeting and recurring.

In conclusion, it is hoped that this summary may be useful in analyzing the "why" of common symptom groupings.

313 First Federal Bldg.

NEPHRITIS IN CHILDREN AS OBSERVED IN FLORIDA

HILLARD W. WILLIS, M. D.
CORAL GABLES

Nephritis in children occurs infrequently in south Florida despite the fact that respiratory infection, the usual antecedent infection in nephritis, has been shown to be as prevalent in Florida as in northern areas.¹ The relative absence of streptococcic diseases and the more favorable course of imported cases of these diseases in south Florida have been a common general medical as well as pediatric observation, particularly in regard to such diseases as rheumatic fever, arthritis and scarlet fever.

The relative infrequency of these diseases is difficult to explain upon any other grounds than climatic differences, the discussion of which is beyond the province of this paper. Suffice it to say in this connection that the high incidence of year round ultraviolet solar radiation, the insular type of climate, the minimum pollution of the air and an almost constant relative humidity may well be the determining factors.

Tables 1, 2 and 3 show the comparative incidence and mortality in hospital cases of nephritis, acute and chronic, and nephrosis in Miami, Louisville and Chicago. While the number of cases of nephritic disease is limited, the number of total admissions is great enough to enable one to draw accurate conclusions as to incidence.

A simple generally accepted classification of nephritis in children is (1) acute hemorrhagic nephritis, (2) chronic nonspecific nephritis and (3) nephroses. As shown in table 4, an analysis of nephritic disease in 300 children observed by Aldrich² revealed that other nephritic conditions are seen in childhood, but with relative infrequency. The nephritis of childhood differs from

From the Division of Pediatrics, Jackson Memorial Hospital, Miami, and the Dade County Hospital, Kendall.

The author wishes to thank Dr. C. A. Aldrich for supplying the statistics from the Children's Memorial Hospital, Chicago, and Dr. Harry S. Andrews for supplying those from the Louisville City Hospital and the Children's Free Hospital, Louisville.

Read before the Dade County Medical Society and the Florida East Coast Medical Society.

adult types because of the much greater regenerative capacity during childhood. This difference has resulted in some confusion in classification. The foregoing classification is followed in the ensuing discussion of nephritis.

ACUTE HEMORRHAGIC NEPHRITIS

This condition usually occurs in childhood or adolescence and follows an acute respiratory infection of streptococcic etiology. Evidence exists that nephritis is not a result of the infection, but is an exceptional overresponse to this type of infection.³ The mode of onset bears no relation to the severity of the preceding infection. It may be an allergic reaction of an anaphylactic nature, as thought by some observers.⁴

The clinical picture is familiar. The onset is sudden with convulsions, nausea, vomiting, headache, dizziness and visual symptoms. Edema is usually present, and hematuria is always present. Other urinary evidence consists of albumin, casts and leukocytes. Specific gravity is usually high, this fact being an important point in differentiation from chronic nephritis. The urinary output is reduced, but rarely does complete renal failure occur. Concentration and dilution tests are usually normal in the acute stage. Hypertension of a moderate degree occurs with frequency. Retention of nonprotein nitrogen occurs in about one-half the cases. Cerebral complications were noted in 23 per cent of Aldrich's patients.² Cardiac involvement was reported in 60 per cent of the cases studied by Lyttle.⁵ Rubin and Rapoport⁶ reported that in 14 of their 55 cases there was serious myocardial damage, definite decompensation occurring in 12. Cardiac failure was noted in only one of the cases studied for this presentation. Cerebral manifestations, however, occurred in 50 per cent of these cases. No death occurred from acute nephritis in this series. The usual mortality rate reported is from 5 to 10 per cent in acute nephritis.

A brief history of the case in which the patient experienced cardiac failure follows.

REPORT OF CASE

Case 1. C. W., a boy aged 7, was admitted to the Jackson Memorial Hospital on October 27, 1938, with a history of tonsillitis three weeks previously with associated pyuria. Edema of the face was noted one week previous to admission.

A considerable degree of edema was present on admission, respiration was increased, the pulse rate was rapid, and the usual urinary evidence of hemorrhagic nephritis was present. Myocardial failure with pulmonary edema developed within twenty-four hours.

Rapid recovery from a critical condition occurred in forty-eight hours after the patient had been placed under an oxygen tent and digitalis and a 25 per cent solution of glucose had been administered intravenously.

Electrocardiographic changes consisted of inversion of the T wave in all leads and left axis deviation. These changes have now disappeared, and no clinical or laboratory evidence of past infection exists.

After being kept in bed for two weeks, the patient was dismissed as the laboratory and physical examinations gave normal results.

The rapid recovery in this case indicates the tremendous ability of children to recover completely from severe nephritis with associated myocardial involvement.

After the acute stage has subsided, treatment is directed first toward removal of potential foci of infection. Intoxication is combated by adequate intake of fluids and by catharsis. Fluids are urged regardless of edema in an effort to dilute waste products and facilitate elimination by the kidneys. Sodium chloride is restricted as sodium favors edema. Diet during the acute early stage should consist of sweetened fruit juice and milk. Webb⁷ was of the opinion that protein should be restricted during the initial and the terminal stage. It has not been shown that a diet of proteins in the presence of renal irritation and residual nitrogen may not cause irritation when these products are eliminated.

The three complications of acute nephritis requiring immediate attention are (1) renal failure, (2) hypertensive encephalopathy or cerebral manifestations and (3) cardiac failure. Constantly rising blood pressure would indicate an impending complication of the nature of one of these conditions.

Renal failure was present in 3 per cent of the cases reported by Rubin and Rapoport⁶. The associated anuria, edema, retention of nitrogen and acidosis presented a syndrome similar to that of uremia, they noted, except for the edema. These authors successfully treated their patients by forcing glucose and saline solution intravenously and giving frequent injections of a 50 per cent solution of glucose. A normal or increased blood volume was maintained in an effort to increase filtration pressure with resulting excretion of urine. One observer⁸ reported excellent results with 10 cc. of a 10 per cent saline solution given intravenously each day.

Cerebral manifestations are always associated with hypertension and are caused by cerebral edema. Treatment is aimed at relief of the generalized vasoconstriction, which is the cause of the hypertension and cerebral edema. The best

results have been obtained by the administration of a 50 per cent solution of magnesium sulfate orally or rectally. Massive doses are tolerated without diarrhea. It may be given intramuscularly in amounts of 0.2 cc. of a 50 per cent solution for each kilogram of body weight if necessary. If convulsions are not controlled by this treatment, a 2 per cent solution of this salt may be given intravenously, or spinal puncture may be tried. Fluids should be restricted.

Cardiac complications consist primarily of myocardial involvement. Treatment is directed toward lessening peripheral resistance by relieving hypertension with magnesium sulfate and restriction of fluids. Cardiac efficiency is improved by the administration of digitalis and morphine, the use of the oxygen tent and the intravenous injection of hypertonic glucose.

After the acute stage has subsided, care should be given the general nutritional and hygienic condition. The patient should be kept in bed until hematuria disappears. The course of acute nephritis is a moot point. Snoke⁹ and other observers concluded that in the majority of cases the disease enters a latent period and may later recur as chronic nephritis of the adult type. Boyle, Aldrich, Frank and Borowsky¹⁰ have much to support their contention that these cases either have a fatal ending or eventually go on to complete healing. Regardless of these varying opinions, it is agreed that all cases should be kept under strict observation for many months before the patient is considered cured.

CHRONIC GLOMERULAR NEPHRITIS

Chronic nephritis occurs infrequently in children. The condition is characterized by edema, hypertension, increase in the retention of nitrogen, albuminuria, casts, hematuria and a rapidly fatal or a chronic course. Boyle, Aldrich and their associates¹⁰ offered convincing evidence that this condition results from nutritional and hygienic factors rather than from infection or from a previous attack of acute nephritis, as formerly thought. They observed that the condition is seen in only the malnourished dispensary class of patient. The presence of but 3 cases of chronic nephritis in my series does not support their views. The nutritional factor would not seem to be the only factor as the dispensary patients in Florida are as poorly nourished as those in northern climes. Climatic and geographic factors must be a contributing cause.

The onset of this type of the disease is insidious. Headache, nocturia and pallor are frequent complaints during the early stages. Death may occur early, or the condition may run a chronic course over a period of many years. Progress of the disease is determined accurately by concentration and urea clearance tests. Death may result from uremia, but occurs usually from intercurrent infection. It is important to differentiate chronic nephritis from acute nephritis and nephrosis as the latter two conditions can be given a much more favorable prognosis. Acute hemorrhagic nephritis is always preceded by acute infection. Neither hematuria nor hypertension is associated with nephrosis. In many patients with chronic nephritis a nephrotic syndrome develops. The course of chronic nephritis is usually characterized by remissions and exacerbations precipitated by infections.

Treatment formerly consisted of restriction of protein, fluids and activity. For years results were greatly disappointing. Aldrich² revolutionized treatment by instituting an entirely different regimen. A diet with adequate protein, minerals and vitamins for normal growth was given, and the activity of the patient was increased. Results have been extremely favorable; much improvement in the general condition of the patients and cures in several instances have been obtained. The terminal complications of cerebral edema and renal and cardiac failure are handled as in acute nephritis.

NEPHROSIS (DEGENERATIVE TUBULAR NEPHRITIS)

This is a chronic disease that occurs infrequently in children and young adults. No true case of nephrosis was observed in the series reviewed; however, 2 cases of chronic nephritis with a nephrotic syndrome occurred. The onset is insidious; pallor and lassitude are characteristic. Edema and albuminuria in great degree are constantly present. Nephrosis is considered by some observers as a stage of chronic nephritis, but the majority of investigators believe it to be an entirely separate clinical entity. A nephrotic syndrome may precede, follow, or be associated with the glomerular nephritis. The etiology of nephrosis is unknown. The pathologic change is a tubular degeneration. Diagnosis is based on the presence of albuminuria and edema in considerable degree in the absence of hematuria and hypertension. Lowered plasma protein and elevated blood cholesterol are constant.

According to Boyd¹¹ the course is influenced by the type of onset. In cases having an acute onset the disease runs a short course with recovery occurring; in cases with a more gradual onset, recovery is slow if it occurs at all. In a series of 36 cases, reported by Schwarz and Kohn,¹² there was recovery in 50 per cent. In this series infection of the accessory nasal sinuses was not an important etiologic factor. The course is characterized by frequent remissions and exacerbations, the patient usually dying from an intercurrent infection, they observed.

The basal metabolic rate has been reported low. Farr,¹³ however, in repeated metabolic studies observed no significant deviation from normal rates.

Treatment is unsatisfactory. The patient should be kept in bed during the entire illness. All possible foci of infection should be removed when possible, and efforts should be directed toward general improvement. Avoidance of intercurrent infections is extremely important. Thyroid medication seems to be of value in some cases. Repeated blood transfusions are helpful in combating the usually present anemia and in increasing the lowered protein content of the blood. Cardiac complications are handled in the usual manner.

Most of the treatment is directed toward lessening the excessive edema, which is massive to the extent of ascites and hydrothorax in many cases. This edema is caused by the lowering of the protein content of the blood, particularly the serum albumin, which results in a low colloidal osmotic pressure. Attempts are made to correct this condition by restoring the protein of the blood with a diet high in proteins and repeated transfusions, but with little success. Acacia administered intravenously has been used by some clinicians with apparently good results. Urea and the mercurial diuretics have been used with moderate success. Hypertonic glucose is of occasional value. Potassium salts may be tried.

Schiff¹⁴ described a new therapy that promises better results, but it has not been used to any great extent in this country. It consists of a diet of raw vegetables and fruits at first. He reported that diuresis sets in after a few days and edema recedes. The yellow of egg, which replenishes the lipid losses from the blood, is next offered. On further improvement a meal of meat is given; then salt-free vegetables and potatoes are added. Schultz and Collier¹⁵ described an alkali treat-

ment with which they obtained dramatic improvement in their cases. By bringing the plasma bicarbonate to a normal level and holding it, they reported, diuresis and subsidence of edema occur; also, the output of albumin is generally greatly diminished. In this treatment the alkalies are given in the form of potassium citrate and bicarbonate and sodium citrate and bicarbonate.

Mechanical measures such as multiple incisions and aspiration are necessary in many instances to relieve the great degree of dependent edema and ascites. Cardiac or respiratory embarrassment may necessitate removal of fluid from the pleural cavity.

SUMMARY

A classification of nephritis that seems to be generally accepted has been presented. The essential features of each type have been reviewed, and available therapeutic measures have been discussed in some detail. The infrequency of nephritis in south Florida is definitely established, lending proof that this disease is a result of streptococcic infection and that its frequency, severity and course are markedly influenced by geographic and climatic factors.

TABLE 1

Incidence and Mortality of Acute Nephritis in 43,612 Pediatric Hospital Admissions in Miami, Louisville, and Chicago

9000 Hospital Admissions	Incidence	Mortality
Miami		
Dade County Hospital	24 cases or	0
Jackson Memorial Hospital	.26 per cent	
13,500 Hospital Admissions		
Louisville		
Louisville City Hospital	66 cases or	7 cases or
Children's Free Hospital	.5 per cent	10 per cent
21,112 Hospital Admissions		
Chicago		
Children's Memorial Hosp.	177 cases or	9 cases or
	.85 per cent	5 per cent

TABLE 2

Incidence and Mortality of Chronic Nephritis in 43,612 Pediatric Hospital Admissions in Miami, Louisville and Chicago

9000 Hospital Admissions	Incidence	Mortality
Miami		
Dade County Hospital	4 cases or	2 cases or
Jackson Memorial Hospital	.04 per cent	50 per cent
13,500 Hospital Admissions		
Louisville		
Louisville City Hospital	22 cases or	3 cases or
Children's Free Hospital	.16 per cent	13.6 per cent
21,112 Hospital Admissions		
Chicago		
Children's Memorial Hosp.	43 cases or	14 cases or
	.2 per cent	32 per cent

TABLE 3

Incidence and Mortality of Nephrosis in 43,612 Pediatric Hospital Admissions in Miami, Louisville and Chicago

9000 Hospital Admissions	Incidence	Mortality
Miami		
Dade County Hospital	0	0
Jackson Memorial Hospital		
13,500 Hospital Admissions		
Louisville		
Louisville City Hospital	16 cases or	2 cases or
Children's Free Hospital	.11 per cent	12.5 per cent
21,112 Hospital Admissions		
Chicago		
Children's Memorial Hosp.	57 cases or	12 cases or
	.27 per cent	21 per cent

TABLE 4

Analysis of 300 Nephritic Conditions Observed By Aldrich

Acute postinfectious hemorrhagic nephritis	70.0 per cent
Chronic nonspecific nephritis	14.5 "
Nephrosis	8.0 "
Renal infantilism	3.0 "
Subacute bacterial endocarditis with nephritis	2.0 "
Syphilis with nephritis	1.5 "
Tuberculosis with nephritis	1.0 "
Amyloid disease	rare

BIBLIOGRAPHY

1. Quillian, W. W.: Respiratory Infections: Incidence and Clinical Course as Observed in a Florida Pediatric Practice, *J. Pediat.* 15:704-709 (Nov.) 1939.
2. Aldrich, C. A. in Brenemann, J.: Practice of Pediatrics, vol. 3, Hagerstown, Md., W. F. Prior Co., 1937.
3. Kellett, C. E.: Nature and Treatment of Acute Glomerular Nephritis, *Practitioner* 139:597-606 (Nov.) 1937.
4. Masugi, M.: Zentralb. f.d.ges.inn. Med. ud. Grenzgeb. 56: 417-428 (May 11).
5. Lyttle, J. D.: Treatment of Acute Glomerulonephritis in Children, *Bull. New York Acad. Med.* 14:212-221 (April) 1938.
6. Rubin, M. I., and Rapoport, M.: Three Major Complications of Acute Hemorrhagic Nephritis in Children; Their Prevention and Treatment, *Pennsylvania M. J.* 40:1029-1035 (Sept.) 1937.
7. Webb, C. H.: Treatment of Acute Nephritis in Children, *South. M. J.* 28:557-562 (June) 1935.
8. Cassoute, Poinso, R.; and Capus: Anurie au cours d'une néphrite aigue chez un enfant de 4 ans. Echee. des divers traitements. Rétablissement de la diurèse par le sérum salé hypertonique intra-veineux, *Bull. Soc. de Pediat.* de Paris 31:109-112 (Feb.) 1933.
9. Snoke, A. W.: Stages, Prognosis and Duration of Glomerular Nephritis in Childhood, *Am. J. Dis. Child.* 53:673-704 (March) 1937.
10. Boyle, H. H.; Aldrich, C. A.; Frank, A., and Borowsky, S.: The Addis Count in Children Following Clinical Recovery from Postinfectious Nephritis, *J.A.M.A.* 108:1496-1498 (May 1) 1937.
11. Boyd, G. L.: Nephrosis in Children; Course, Prognosis and Treatment, *Canad. M.A.J.* 19:665-668 (Dec.) 1928.
12. Schwarz, H., and Kohn, J. L.: Lipoid Nephrosis; Clinical and Pathologic Study Based on 15 Years' Observation with Special Reference to Prognosis, *Am.J.Dis. Child.* 49:579-593 (Mar.) 1935.
13. Farr, L. E.: Basal Metabolic Rate of Young Children with Nephrotic Syndrome, *Am.J.Dis. Child.* 56:309-312 (Aug.) 1938.

14. Schiff, E.: Die Lipoidnephrose im Kindesalter. Klinische Beobachtungen und Ernährungstherapie, Fortschr. d. Therap. 8:617-625 (Oct. 25) 1932.
15. Schultz, F. W., and Collier, J. L.: Treatment of Nephrosis in the Young Child, J.A.M.A. 109:1959-1963 (Dec. 11) 1937.

2506 Ponce de Leon Blvd.

THE HOSPITAL AND THE NATIONAL EMERGENCY

LUCIUS W. JOHNSON, CAPTAIN, MEDICAL CORPS,
UNITED STATES NAVY
PENSACOLA

Before I get under way, I want to make it plain that while I work for the government, I do not speak for it. Any ideas or opinions that I may express are entirely my own and have no official sanction. I venture to talk on this subject only because I read much hospital literature and talk with many hospital officials, most of whom are deeply involved in problems associated with the emergency.

It would be difficult to find another institution as delicately attuned to social and economic trends as the hospital must be. Even the lightest straw, blown about by the political winds, may gravely affect the hospital in its management, its endowment, or its public relations. In these days, the hospital administrator must have both feet on the ground and his eye on the main chance. He must keep his nose to the grindstone, his ear to the earth and his finger on the pulse of public opinion, an undertaking that is no mean acrobatic stunt.

Still gasping from his struggles with unionism and social security, both of which are unfinished battles, he finds himself face to face with that ogre, the national emergency, whose tentacles are reaching for him from many angles. Authorities seem to differ on the number of tentacles possessed by the average ogre, but this one has at least five. They are the medical staff, the interns and residents, the nurses, procurement of supplies and equipment, and hospital preparedness. The national government has recognized these difficulties and has taken definite steps to ameliorate them, but still there remain obstructions which administrators themselves must surmount in their hospital management.

THE MEDICAL STAFF

One of the first essentials in assembling an army is physicians. They are needed to make

Read before the Annual Meeting of the Gulf Coast Clinical Society, held in Pensacola, October 15, 1941.

the physical examinations so that the unfit and those with communicable disease may be excluded. They must plan the extensive public health work for ships, camps, training stations and the adjacent civil communities. They must operate the hospitals which are needed wherever men of the armed forces may be assembled. There is only one source from which the government may obtain the great number required, and that is the young physicians in civil practice.

Careful physical examinations at the time of entering the military services are important to the government, for the pension laws provide that physical disabilities which develop during service are an incident of the service, even though it is obvious that they have existed for years. I used to wonder how so many serious defects and deformities could be passed by the medical examiner at the recruiting office. Recently I heard a member of a physician's family say, "Doctor can't spare time from his practice to examine the selectees. He has a third-year medical student do it for him." Uncle Sam deserves better service than that, and so do the taxpayers.

When the young physicians from civil practice are called to military duty, the most active men on the staffs of many of the hospitals are taken away, and a much heavier load falls on the older generation. Men who are just beginning to realize the luxury of saying, "My assistant will take care of the case," and going back to bed when called at night, will have to take up again the burden of night calls. In some cities there is beginning to be advocated a plan, already developed by the English, to take some steps to protect the practice of the younger men who are called for defense activities.

One of the foremost of the problems that faces the staff under these circumstances is to determine who will write the medical records. These are most vital to the hospital because good records are essential to recognition by the American Medical Association and the American College of Surgeons. In one large city hospital three courses were submitted to the staff:*

1. They might send their office records of the patient to the hospital, to be copied into the hospital medical record.
2. The hospital would supply a medical stenographer, to whom the doctor might dictate the history and physical examination at the bedside.
3. They might themselves write the history and medical record for each of their patients.

The specialty groups, which have been organized in many hospitals, have not yet been

*Personal communication from Dr. Clement C. Clay.

called to active duty. It does not seem likely, at this moment, that they will be called unless this country becomes an active belligerent in the war. Since most of the specialty groups are in the larger hospitals, their departure may not have such a serious effect on the hospital as many now fear.

Careful study of the work done by individual employees of hospitals has shown that some of the duties now performed by each group can be passed down to another group with less technical training. For example, with increasing frequency anesthetics are being given by nurses instead of physicians. Many of the nurses' duties, in turn, are being passed down to nurses' aids.

In Canada an agreement has been reached whereby in hospitals which are unable to obtain a sufficient number of physicians, nurses may perform certain procedures. They include the taking of blood pressure readings, the administration of subcutaneous and intramuscular injections and of intravenous injection of saline, glucose, and other fluids for medical or diagnostic purposes, the taking of blood for serologic tests, the removal of sutures, the recording of histories (except the physical examination) and the writing of progress notes as dictated by the physician.

Once a step of this sort is taken, it usually means that the physician permanently relinquishes his sole right to perform these procedures, a right that he was ready to fight for a short time ago. Once it is shown that these tasks can be done by nurses as well as by physicians, their performance is never again wholly the physician's prerogative. The only chance to recover his rights in this particular would be for trained nurses to become more scarce than physicians.

A number of hospitals have found it advisable to invite physicians to join their staffs who were previously unable to attain this privilege. Under these circumstances the plan of making all staff appointments on a yearly basis would be of great advantage. The misfits who do not meet their obligations, or do not uphold the hospital standards, may be eliminated by the simple device of failure to reappoint them. Institutions and individual physicians alike will find it necessary to make many adjustments and to sacrifice standards which they formerly thought unalterable. Every effort should, however, be made to preserve these standards at the highest possible level. Every concession which lowers them should be accepted only as a temporary measure.

INTERNS AND RESIDENTS

The shortage of house officers is no new thing. It has been receiving increasing notice from educators for some years. During the year ending June 30, 1941, the degree of Doctor of Medicine was conferred on 5,275 persons in the United States. In hospitals approved by the American Medical Association there are 6,874 internships. Since many graduates do not seek appointments as interns, there would be vacancies even without the emergency. Also approved were 4,683 residencies and 550 fellowships.

The preparedness program has already had a serious effect on the house staffs of many hospitals. One new development may be suggestive of future needs. Large and famous hospitals, which have always been able to choose their interns from a great excess of applicants, are today advertising in the journals, trying to get interns and residents. This dearth indicates hard times ahead and severe competition for smaller hospitals and those which are remote from the large centers of population.

One step toward easing the shortage of house officers is the recommendation recently made by the executive council of the American Medical Association that medical colleges which can do so should increase the enrollment of the class entering in 1941 by 10 per cent. Add to this the recommendation that medical schools continue instruction during the summer so that the time of graduation may be advanced, and one sees that definite progress is being made toward a solution of some of the hospital's problems.

A mechanism has been provided whereby the intern may secure a deferred rating so that he may complete his term. The status of the resident is not so well established, and it appears to be the obligation of the individual hospital to convince the local authorities that its residents and interns are essential to its work.

Each hospital should undertake a careful analysis of all the duties of its house staff. The time of the interns must be conserved for work that no substitute can perform. Clinical time is to be increased and clerical time reduced. Non-professional persons should be provided to relieve the intern of much of the history taking, clinical recording, first aid and dressings, and other duties that can be delegated to less essential personnel.

Recent graduates and junior members of the staff may be asked to come in and give their aid

in emergencies. It will probably be necessary to pay young physicians either for part time or whole time service for doing house staff work.

NURSES AND NURSING AIDS

In the United States there are estimated to be about 200,000 nurses, perhaps from 15 to 20 per cent of whom are married or retired. The number of nurses needed by the Navy and the Army is stated to be about 10,000. Twenty thousand more will be needed for visiting nurses, increased public health work and defense industries. In the hospitals, many duties are being passed on to nurses that formerly were done by physicians. All these forces, acting together, have suddenly produced an acute shortage of nurses.

The need was quickly recognized, and Surgeon General Parran of the Public Health Service appealed to the Congress for funds. This request was promptly approved, and money from the federal treasury is now available for aid in the training of nurses. These funds will be used in four ways:

1. For refresher courses to equip retired or inactive nurses to resume nursing work.
2. To increase the capacity of nursing schools.
3. To mobilize the Red Cross reserve nurses for military needs.
4. To train nurses' aids, thereby providing partly trained women, several of whom will work under the direction of a trained nurse.

At present, the use of these funds is limited to nursing schools connected with hospitals having a daily average of at least 100 patients. This restriction is necessary because the appropriation amounts to only \$1,250,000. The hope has been expressed that additional funds may later make it possible to extend this opportunity to smaller schools. About half of the 500 eligible schools have already applied for aid in expanding their teaching facilities.

The organized nurses look with dubious eyes on the training of so many additional women, fearing that there will be excessive unemployment after the emergency ends, which might lead to disastrous competition with lowering of standards. But this future possibility cannot be allowed to interfere with action to relieve the present needs.

The distribution of nurses is somewhat uneven at present. It appears that nurses in the South, for various reasons, have volunteered for military duty more promptly than their sisters in the North. Also, there is a sudden increase in the marriage rate among nurses, both in and out of the military services.

The American Red Cross has assumed the responsibility of training 100,000 volunteers for service as nurses' aids. These specially trained women will be of inestimable value in helping to meet the shortage of nurses. They will be trained to serve as assistants to nurses in hospitals, clinics, or the home, but will not be used to replace paid workers. Under the supervision of a graduate nurse, they will supplement the more highly trained personnel. Selection and training will be in the hands of the more than 3,700 Red Cross chapters.

The course provides eighty hours of instruction in a period of seven weeks, with classes limited to 30 students. Those who complete the course will be enrolled in the Volunteer Nurse's Aid Corps of the Red Cross and will be expected to render at least 150 hours of adequate service yearly.

Teaching of nurses' aids has three objectives:

1. To train a group of intelligent women to give simple bedside care, and to make them familiar with the ideals and routine of the hospital.
2. To train them as assistant workers in disasters occurring in the civil community.
3. To make them familiar with the details of care of the sick, both at home and in the hospital.

There is also impending a shortage of x-ray and laboratory technicians, occupational therapists, physical therapists and other technical hospital aids. For the past two years the American Red Cross has been listing technicians in these branches and appraising their suitability for mobilization. Thus every shortage of hospital personnel has been realized, and steps have been taken to ease the institutions over this difficult period.

PROCUREMENT OF SUPPLIES

Difficulty in securing certain articles for hospital use developed early. The civilian hospitals found themselves in sharp competition with the Army and the Navy, also with the Red Cross and buyers for foreign use. For example, supplies to the value of \$251,698 were shipped overseas in 1940 by the Medical and Surgical Relief Committee of America. Early in the course of the emergency there was a tendency toward overbuying and hoarding by some hospitals, but it soon became evident that the chances of loss were at least equal to the chances of profit by hoarding.

The Office of Production Management, in collaboration with the Office of Price Administration and Civilian Supply, and the Health and Medical Committee of the Federal Security Agency, has recently formulated a plan, known

as the Health Supplies Rating Plan, to secure an adequate supply of certain materials which are essential to the health of the armed forces and the civilian personnel. This plan is designed to assist a producer of such supplies in procuring material so that he can continue to produce articles which are essential to hospitals, clinics and sanatoriums. The plan makes provision only for materials to be supplied to the manufacturer. It does not establish priority among individual hospitals in securing their supplies from the producer.

In addition to this plan, there is a civilian allocation program, designed to provide sufficient supplies of fourteen essential groups of materials to fill the needs of hospitals, clinics and sanatoriums. The highest civilian rating is given to orders placed by such institutions. It is emphasized that the preferences granted under this program shall not be used to accumulate excessive inventories.

With these precautions taken so early, there should be little interference with the flow of raw materials to the manufacturer and of finished products to the hospitals. No doubt there will be many kinks to iron out, but the sympathetic and cooperative attitude already shown by the Office of Production Management and the Office of Price Administration and Civilian Supply indicates that every effort will be made to avoid difficulties in securing supplies and equipment for hospitals.

It will be necessary for each hospital to protect and conserve its resources, for replacements may not always be available. Substitution of less desirable items for the preferred ones will be increasingly necessary, and there is no class of citizen who will complain louder over this replacement than will the physician.

There will undoubtedly be advances in prices, with an additional burden on the hospital finances. One effect that can safely be predicted is the more rapid spread of uniform methods for hospital accounting and the perpetual inventory. When a hospital administrator applies for priority in the purchasing of supplies for his institution, he should be prepared to show the average rate of use, the safe minimum quantity, the replenishment order point and the amount on hand of each article required.

HOSPITAL PREPAREDNESS

If world affairs continue to develop along present lines, it is reasonable to anticipate that

the United States may become an active belligerent. No one can foresee just what type of hostilities will follow its entrance into the war, but it would be the height of folly not to profit by the war experiences of other hospitals. The time is at hand when hospital boards and executives must give serious thought to the safety of their institutions in case of attack by the enemy.

England, after two years of strenuous effort to prepare for defense against aerial attack, found herself woefully deficient in many ways when the actual test came. This country is getting a late start, but the Office of Civilian Defense is getting energetically to work on the problem. A uniform plan is being developed which will adapt the knowledge gained in England's bombing experience to the special conditions existing in this country.

The day is gone when a white flag with a red cross may be depended on to give a hospital immunity from attack. Up to the time of the last war, military commanders vied with each other in the punctiliousness with which they observed the niceties set forth at the Hague and Geneva conventions. They are now no better than those of any other treaty, and treaties are currently worth a dime a dozen.

The likelihood of an attack on a hospital should be judged by its neighbors, rather than by the distance from the seaboard. If an institution is surrounded by industrial, transportation or administrative activities which would be worth a bomber's attention, its distance from the borders of the country would be of little importance. The hospital itself might not be the actual target, but it certainly would be in dangerous company.

If the local antiaircraft defenses are very elaborate, the danger to the hospital may be greater than if there were no protection at all. In the face of heavy fire, the bombers will not come low enough to deliver their missiles with accuracy at their military targets, but are more likely to unload promiscuously at safer altitudes. The dispersion will be greater, and innocent neighbors are more likely to be hit.

The importance of the blackout appears to be dwindling rapidly. Methods of circumventing it have been developed, and its protective value is small. The idea is spreading that a dazzling array of searchlights is more disturbing to the bombers and gives greater protection than the blackout.

No adequate means is known of protecting a

hospital from the effects of a direct hit by a large aerial bomb. The most that one can hope to accomplish is to reduce the damage to a minimum and to be able to continue functioning as a hospital. On the civil organization of the community rests the burden of getting the injured to the hospital. The responsibility of being prepared to care for the patients, even under the most adverse conditions, rests on the hospital boards and executives. They should give special attention to these details in their organization:

1. Maintenance of utilities such as power, light, water, gas, sewerage and telephone.
2. Control of fires and structural damage.
3. Casualty service: first aid, major surgery and care of gassed persons.
4. Protection of food supplies.
5. Maintaining equipment and supplies.
6. Evacuation of those able to leave the hospital.

One hesitates to go into further detail at this time because it is understood that the Office of Civilian Defense is about ready to issue a plan for hospital organization in emergency. It is important that all hospitals should adopt this standard plan in their preparedness work.

Experience of others indicates that each 1,000 air raid casualties will average 300 killed, 100 walking and 600 seriously enough injured to be retained in the hospital. The number of slightly injured is very small, and the injuries of an average air raid patient require seven or eight times as much dressing material as the ordinary injury of a patient in civil life in peace times.

The principal types of casualties will be:

1. Burns.
2. Penetrating, perforating and lacerated wounds.
3. Crushing injuries from collapsing buildings.
4. Fractures, simple and compound.
5. Wounds of special parts such as the head, face, jaw, chest and abdomen, for the care of which special teams should be organized, trained and equipped.
6. Shock, primary and secondary.
7. Hemorrhage.
8. Neuroses.
9. Gas.

It would be impossible to equip all the aid stations with all the different materials that the various physicians would use in dressings and treatments. As soon as the personnel of the aid stations is chosen, they should therefore, get together and agree on standard methods of treating such injuries as burns, wounds, fractures and shock and also on uniform methods of transfusion and intravenous injection. This agreement will aid greatly in avoiding confusion when the emergency arrives.

CONCLUSIONS

An old dorky was once asked how he had managed to reach such an advanced age. He

replied that he thought it was because he had learned to cooperate with the inevitable. The time is now upon those of us who are administrators of hospitals when we must learn to cooperate with the inevitable if we are to retain control of our institutions. If, instead of trying to push back the car of Juggernaut, we climb aboard and try to gain the driver's seat, we may accomplish real good. We may direct into safe and sane channels the public opinion that demands a change in the hospital system without having a clear idea of what the change should be, or what is the goal.

This period of emergency does not appear to be a suitable time for extensive additions to hospital buildings, unless the means to maintain the structures after the emergency are definitely in sight. Increased taxes and the uncertainties of the future are going to make it much more difficult to obtain funds. The Surgeon General of the Navy in a statement before a congressional committee, took the very laudable stand that only temporary buildings of low cost should be erected to accommodate the temporary expansion, so that there would be no intolerable burden of maintaining unused buildings after the emergency.

It is safe to predict that one result of the emergency will be a more closely knit system of hospitals in the United States, with the government exerting more and more control over them. There will be more standardized methods of hospital administration and accounting. One of the first steps will be financial aid by the government to hospitals in rural areas and small towns. The large foundations, which give aid to colleges and hospitals, do not fail to exert a considerable influence in the management of the institutions which they aid. It is not likely that the government will be outdone in this respect.

We are now planning for war. Soon we must plan for peace. Never again will we see the free and easy, individualistic, competitive management that now is characteristic of our hospitals. There will be more cooperation, more government control. Many old time prejudices against outside interference with our methods will be broken down. All during the emergency we will be learning lessons, broadening our point of view and recognizing the value of working together. We must neither gloss over nor forget these lessons, for we can never revert to the old ways.

Labor difficulties in hospitals will increase.

If we are to hold our best and most reliable employees, we must match the ever rising wages and the improved living conditions of industry. The turnover will be more rapid, and we will probably have to be contented with a lower grade of worker than hospitals have been able to attract in the past. Hospitals must continue to foster good will, good publicity and education of the public on the importance of the community hospital.

Every smart farmer knows that he can grow healthier chickens if he throws the feed among the litter, where they have to scratch for it, instead of handing it to them on a silver platter. Many hospital administrators are going to have to do some serious scratching to keep their hospitals alive through the changing years which are ahead. Those that do survive, and are able to adjust themselves, will be stronger and more vigorous because of the experience.

AMINOPHYLLINE IN CHEYNE-STOKES RESPIRATION

REPORT OF A CASE IN CORONARY DISEASE

D. G. STANNUS, M. D.

AND

C. FREDERIC ROCHE, M.D.
MIAMI BEACH

During the course of the treatment of progressive coronary disease there often arises a critical period wherein the patient is unable to sleep, either due to the fact that he has exhausted the physician's armamentarium, or because he may be kept awake by cyclic breathing. The latter was true in the case presented.

REPORT OF CASE

A. B., a man aged 55, was first examined on Dec. 26, 1939, because of severe pain in the chest radiating down the left arm and brought on by slight exertion. His blood pressure was 230 systolic and 130 diastolic; the pulse rate was 120. An electrocardiogram revealed a regular sinus rhythm with a rate of 64, a left bundle branch block and a mixed type of coronary pattern indicating an anterior posterior coronary occlusion. There was a depressed ST segment with inversion of the T wave in lead 1, an elevated ST segment with a depressed T wave in leads 2 and 3, and an elevated ST segment with an upright T wave in lead 4F. This tracing was compared with one made by the patient's physician in New York on Dec. 7, 1939, which "showed a left bundle branch block with a ventricular rate of 120 and at that time T2 and T3 were upright and T4F inverted." This physician had also seen the patient in 1937, at which time he had severe decompensation. During the five months preceding our examination his blood pressure had gradually risen from 140 systolic and 80 diastolic to 180 systolic and 110 diastolic.

On December 27 at 3:30 a. m. he was seized with severe precordial pain which radiated down both arms.

The skin was cold and moist. The blood pressure was 120 systolic and 78 diastolic; the pulse rate was 76. The left border of the heart extended to the anterior axillary line on that side. There was a systolic murmur over the mitral area. He was given the usual treatment, complete bed rest and opiates, but after one week gallop rhythm developed. The blood pressure always remained in the neighborhood of from 120 to 140 systolic and 80 diastolic, and the pulse rate was around 120. In an electrocardiogram made on Jan. 15, 1940 the T waves in the limb leads were still inverted, but small; the T wave in the chest lead was still upright, but small. There was an occasional extra systole.

We were able to keep the patient fairly well under sedation by administering dilaudid 1/64 Gr., pantopon 1/3 Gr. and luminal 3/4 Gr. every four hours. Cheyne-Stokes respiration was characteristic; in fact, his wife commented that she had noticed the occasional pause in his breathing during the past four years. This condition remained unchanged until January 19 when a psychosis of persecution developed. He fought sleep, believing that he would not awaken again. At 12:30 a. m. on that date he was given dilaudid 1/64 Gr., and this dose was repeated five times during the next twelve hours. He would sleep from ten to thirty minutes and awaken following a long pause in respiration. The respiratory rate varied from about 24 to 28. Sodium bromide 30 Gr. and chlorol hydrate 10 Gr. were given by rectum at 9 p. m. At 3:30 a. m. on January 20 the dose of bromide and chlorol hydrate was again repeated. The patient did not sleep during the night. At 10 a. m. he was given paraldehyde 6 drachms. He slept in short naps. At 4:30 p. m. he was given cyclopropane; at 6:45 p. m. nembutal 3 Gr. by rectum, which was expelled; at 8:30 p. m. sodium luminal 2 Gr. hypodermically. Nembutal 3 Gr. was again given by rectum at 9 p. m. and was partially expelled. At 11:45 p. m. morphine sulfate 1/4 Gr. was given hypodermically.

During the whole interim of forty-eight hours the patient only slept at intervals for periods lasting from ten to thirty minutes. Every time he would doze, the apnea followed by the labored breathing of the Cheyne-Stokes respiration phase would awaken him. As some improvement in respiration had for a short time followed the administration of 10 cc. (3 3/4 grains) of aminophylline intravenously, it was decided to give a larger dose. Thirty cc. (11 1/4 grains) was given at 12:10 a. m. on January 21. The Cheyne-Stokes respiration disappeared immediately, and the patient fell asleep for thirty minutes. The pulse was of better quality. At 1 a. m. 20 cc. (7 1/2 grains) of aminophylline and 30 cc. of 50 per cent glucose were given intravenously. Pantopon 1/3 Gr. hypodermically was also given. The patient slept until 8:45 a. m. The dose of pantopon 1/3 Gr. was repeated twice during the day with good sedative response. At 8 p. m. on January 22, 50 cc. (18 3/4 grains) of aminophylline was given intravenously with pantopon 1/3 Gr. hypodermically. Morphine sulfate 1/4 Gr. was given at 9 p. m. and pantopon 1/3 Gr. at 9:30 p. m. The patient again had a restful sleep.

We continued to repeat the large dose of aminophylline at intervals of from eight to twelve hours and to follow it with an opiate until the case was terminated. It seemed to us that the Cheyne-Stokes respiration would awaken the patient even after large doses of opiates had been administered unless aminophylline was given.

The patient became weaker in spite of continuous oxygen therapy during the entire period of hospitalization. He died of left ventricular failure on January 26.

This case demonstrates the difficulty of producing a sedative effect in a patient under the conditions described. Aminophylline in large doses will correct Cheyne-Stokes respiration, thereby protecting the sedation of the patient.

BRIEF SUMMARY OF LITERATURE

Vogl in 1927 first used aminophylline, a double salt composed of theophylline, 75 per cent and ethylenediamine, 25 per cent in the treatment of cyclic breathing.¹ English investigators² claimed that ethylenediamine is the important component in aminophylline, and another group³ reported that the theophylline constituent is the active component. The latter group demonstrated that other amines in combination with theophylline, such as monoethanolamine, isopropanolamine and theophylline methylglucamine, will abolish cyclic breathing. Whichever component is the factor, the consensus is that the action has a widespread effect on the central nervous system. Greene, Paul and Feller⁴ demonstrated a fall in the intrathecal and venous pressure by measuring the spinal fluid and the venous pressure simultaneously after the administration of 0.24 to 0.48 Gm. of aminophylline. They also noticed an increase in the vital capacity of patients suffering with bronchial asthma. They could not demonstrate a change in cardiac rate nor in systolic or diastolic pressure as shown by the electrocardiogram.

There has been no satisfactory explanation as to the nature of the effect of aminophylline. Schmidt⁵ recently reviewed the functions of the carotid and aortic bodies. Consideration of their functions raises the question as to whether the stimulation to the respiratory and vasomotor centers can be explained on this basis. In brief, it is thought that the carotid and aortic bodies have specialized functions due to the presence of sensitive chemoreceptors, which respond to changes in the chemical composition of the arterial blood. Impulses are carried to the central nervous system by way of the glossopharyngeal and vagus nerves. These chemoreceptors can be stimulated by anoxemia, asphyxia, increased carbon dioxide tension, increased hydrogen ion concentration, and a variety of drugs including cyanide, sulfide, nicotine, lobeline, conine and choline. Perhaps the prolonged increase in carbon dioxide tension of the blood in cyclic breathing is no longer a sufficient stimulus to these chemoreceptors, making it necessary to use a chemical such as theophylline ethylenediamine.

In the literature on coronary diseases, Askonzy in 1895 was the first to call attention to the xanthines in angina pectoris. In 1902 Breuer declared that discovery of the xanthines was the most noteworthy achievement of the decade and

in 1929 Gilbert and Kerr⁶ affirmed his statement. In attempting to show that xanthines (theobromine and aminophylline) have no specific action in the routine treatment of cardiac pain, Gold, Kwit and Otto⁷ studied 100 ambulatory patients with angina pectoris. These patients were given from 15 to 60 grains of theobromine daily and from 9 to 12 grains of aminophylline. Recently, however, Levy, Bruenn and Williams⁸ induced oxygen want in 10 patients subject to attacks of cardiac pain by making them breathe 10 per cent oxygen and 90 per cent nitrogen. They discovered that aminophylline injected intravenously in doses of 0.48 Gm. caused a prolongation of 63 per cent in the time of appearance of pain.

Regarding experimental coronary infarction reports conflict. Fowler, Hurevitz and Smith⁹ noted the disappearance of the cyanotic area of an infarct, produced by ligating the coronary arteries in dogs, after the intravenous injection of aminophylline. Gold, Travell and Modell¹⁰ ligated the coronary arteries in cats and after administering vigorous treatment for two or three weeks concluded that there was no influence on the course of infarction. The fact, however, that the latter group used the intramuscular method of therapy, except that the first dose after the operation was given intravenously, may account for the difference in the results obtained by them and by Fowler, Hurevitz and Smith,⁹ who used the intravenous method of administration. The favorable report of Levy and his associates as compared with that of Gold and his coworkers on cardiac pain may be due to the same reason, because they also administered aminophylline intravenously.

Aminophylline in doses of 7 1/2 grains with 30 cc. of 50 per cent glucose given intravenously has received acclaim in cases of status asthmaticus. Its effect is said to be directly on the smooth muscle of the bronchi, causing it to relax.

Carr¹¹ recently reported the effects of aminophylline on 22 asthmatic patients who were refractory to adrenalin. The dose was 0.48 Gm. or 2 cc. given intravenously. In half of these patients relief was evident in from twenty to thirty minutes. In none was it necessary to repeat the injection within a period of less than two hours.

SUMMARY

1. Large doses of aminophylline given intravenously will correct Cheyne-Stokes respiration for as long as eight hours.

2. There has been no satisfactory explanation for this effect on the respiratory center.

Perhaps the chemoreceptors of the carotid and aortic bodies are stimulated by the presence of aminophylline in the arterial blood and in turn stimulate the respiratory and vasomotor centers by way of the glosopharyngeal and vagus nerves.

3. Aminophylline lowers the intrathecal and intravenous pressure.

4. When given intravenously aminophylline delays the appearance of cardiac pain incident to oxygen want induced by making patients breathe 10 per cent oxygen and 90 per cent nitrogen.

5. Aminophylline given in tablet form has a questionable effect on cardiac pain.

6. In bronchial asthma, aminophylline in doses of 0.48 Gm. administered intravenously gives some patients instant relief and others relief within thirty-five minutes. There is an increase in vital capacity, which is probably due to the relaxation of the smooth muscle of the bronchi.

BIBLIOGRAPHY

1. Vogl, A.: Erfahrungen über Euphyllin bei Cheyne-Stokes und anderen Formen zentralen Atemstörung, *Med. Klin.* **28**:9, 1932.
2. Marais, O. A. S., and McMichael, J.: Theophylline-Ethylenediamine in Cheyne-Stokes Respiration, *Lancet* **2**:437-440 (Aug. 21) 1937.
3. Nathanson, M. H., and Fitzgibbon, J. P.: Pharmacology of Cheyne-Stokes Respiration, *Am. Heart J.* **17**:691-700 (June) 1939.
4. Greene, J. A.; Paul, W. D., and Feller, A. E.: Action of Theophylline with Ethylenediamine on Intrathecal and Venous Pressures in Cardiac Failure and on Bronchial Obstruction in Cardiac Failure and in Bronchial Asthma, *J.A.M.A.* **109**:1712-1715 (Nov. 20) 1937.
5. Schmidt, C. F.: Functions of Carotid and Aortic Bodies, *J. Lab. & Clin. Med.* **26**:223-231 (Oct.) 1940.
6. Gilbert, N. C., and Kerr, J. A.: Clinical Results in Treatment of Angina Pectoris with Purine Base Diuretics, *J.A.M.A.* **92**:201-204 (Jan. 19) 1929.
7. Gold, H.; Kwit, N. T., and Otto, H.: Xanthines (Theobromine and Aminophylline) in Treatment of Cardiac Pain, *J.A.M.A.* **108**:2173-2179 (June 26) 1937.
8. Levy, R. L.; Bruenn, H. G., and Williams, N. E.: Modifying Action of Certain Drugs (Aminophylline, Nitrites, Digitalis) Upon Effects of Induced Anoxemia in Patients with Coronary Insufficiency with Remarks on Therapy, *Am. Heart J.* **19**:639-654 (June) 1940; Correction **20**:235 (Aug.) 1940.
9. Fowler, W. M.; Hurevitz, H. M., and Smith, F. M.: Effect of Theophylline Ethylenediamine on Experimentally Induced Cardiac Infarction in Dog, *Arch. Int. Med.* **56**:1242-1249 (Dec.) 1935.
10. Gold, H.; Travell, J., and Modell, W.: Effect of Theophylline with Ethylenediamine (Aminophylline) on Course of Cardiac Infarction Following Experimental Coronary Occlusion, *Am. Heart J.* **14**:284-296 (Sept.) 1937.
11. Carr, H. A.: Treatment of Acute Attacks of Bronchial Asthma by Intravenous Injection of Aminophyllin, *J. Lab. and Clin. Med.* **25**:1295-1299 (Sept.) 1940.
12. Gold, H.: Drug Therapy in Coronary Disease, *J.A.M.A.* **112**:1-6 (Jan. 7) 1939.
13. Forster, D. E.: Cheyne-Stokes Respiration; Theophylline-Ethylenediamine in Treatment, *Northwest Med.* **38**:172-173 (May) 1939.

14. Brown, G. T.: Aminophyllin in Asthma, *J. Allergy* **10**:64-65 (Nov.) 1938.

15. Efron, B. G., and Everett, P.: Theophylline Ethylenediamine (Aminophyllin) in Bronchial Asthma, *New Orleans M. & S. J.* **92**:77-79 (Aug.) 1939.

16. Riseman, J. E. F., and Brown, M. G.: Medicinal Treatment of Angina Pectoris, *Arch. Int. Med.* **60**:100-118 (July) 1937.

541 Lincoln Road.

STERILITY IN MAN

PERRY D. MELVIN, M. D.

MIAMI

A childless marriage may, of course, be the fault of either the husband or the wife, or of both. Until the last quarter of a century, however, the wife has customarily borne the blame for a fruitless mating, and no serious studies of male fertility were undertaken. This lack of interest in male fertility was due to many factors, perhaps the greatest of which was the misconception that potency is ample evidence of fertility. Potency, or ability to have successful intercourse, may have little to do with sterility, as a very potent person may be quite sterile.

It is generally agreed that the incidence of sterile marriages is about 10 per cent and that the man is about as often to blame as the woman. In large series of sterile unions that have been studied by various writers the percentage in which the man was found at fault varies from 45 to 65 per cent. There is about a fifty-fifty chance in any given case that it is the man who is deficient. If this observation has any significance at all, it certainly means that any study of a sterile union should begin with the male, since he is by far the easier to evaluate.

The purpose of a study of sterility is not only to detect absolute sterility, but also to arrive at an estimate of the relative fertility of each partner with each considered separately and the two considered together as a marital unit. There is a difference in the grade of fertility for each marriage, as well as for the individual partner. This fact is evident in cases in which one person proves fruitful to one mate, yet barren to another. It becomes the duty of the physician, therefore, to detect and overcome the causes of absolute sterility or to stimulate the existing fertility to such a level that conception may occur.

A great many conditions may be the cause of male sterility. It is easiest to consider cases of sterility as being true or false, true sterility de-

Read before the Dade County Medical Society, Miami, Aug. 5, 1941.

scribing cases in which no spermatozoa are produced and false sterility referring to cases in which production is normal, but delivery of the sperm to the outside is interfered with. Thus these cases are essentially either obstructive or non-obstructive, the latter referring to cases of defective spermatogenesis.

True azoospermia, or absence of spermatozoa, is a physiologic condition occurring in boys and old men, or after sexual exhaustion. It is a pathologic condition, however, when it is associated with undescended testicles, testicular atrophy, whether congenital or acquired, or the various endocrinopathies. Acquired testicular atrophy may be the result of trauma, roentgen therapy, infections, intoxications, or tumors. The metastatic orchitis occurring in association with mumps is a well known cause of testicular atrophy resulting in sterility, and the dangers from over-exposure to roentgen rays are commonly recognized.

Sterility due to endocrine imbalance is obvious and easy to diagnose in such extreme conditions as gigantism, acromegaly, dwarfism of pituitary origin, Simmond's disease (pituitary cachexia), cretinism, Addison's disease and adrenal cortical tumors. These conditions are not important, because sterility is not the chief concern regarding them, and the diagnosis of a major endocrine disaster is obvious. It is the subclinical type of endocrine imbalance that is easily missed; and the patients in cases of this type often complain only of sterility. A careful history and a thorough physical examination with necessary laboratory tests, such as the determination of the basal metabolic rate, will uncover the endocrine background of most of these cases.

In some instances, remote devitalizing factors including sexual exhaustion, prolonged emotional stress, physical fatigue, blood dyscrasias and certain constitutional diseases such as the prolonged fevers, syphilis, tuberculosis and diabetes, may cause temporary cessation of spermatogenesis in testes that are structurally normal.

False azoospermia, in which the production of sperm is normal, but sterility is due to defective transmission of the sperm to the outside, presents a different problem. Obstructive sterility is usually dependent upon closure of the epididymis, vas deferens or the ejaculatory duct, owing to inflammation, and gonorrhea is by far the most frequent cause of this type of inflammation. Gonorrhea accounts for at least half of

the cases of sterility in both men and women. Partial obstruction is productive of oligospermia in many cases, as shown by a decrease of spermatozoa in the count. Normal spermatozoa are produced by the testicular cells, but occlusion, or partial occlusion, of the seminiferous pathways by congestion or stricture, prevents their transmission to the urethra. In order for sterility to be complete, such blockage must be bilateral.

Normal spermatozoa may be injured in their passage through the seminal tract by the presence of infection anywhere along the way. Infection of the prostatic or seminal vesicles is the most frequent cause of this sort of injury.

In studying a given case of male sterility, the history is of more importance for prognosis and in devising treatment than for diagnosis. Functional disturbances may be revealed with reluctance by the patient. The importance of a history of mumps, gonorrhea, syphilis, or testicular trauma is, however, obvious.

The physical examination will reveal the objective causes of sterility, such as arrested secondary sexual characteristics suggesting an endocrine disturbance, or anomalies of development such as hypospadias or undescended testicles.

The most important single examination, however, is that of the semen. Finding normal sperm cells in the fluid obtained by massage of the prostate and seminal vesicles is a fairly accurate way of establishing the normalcy of the male patient. This practical test often fails, however, as sperm cells may not be present normally; in consequence, the examination of an ejaculated specimen is much more dependable and accurate. The specimen is perfectly satisfactory if collected in a clean, powder-free condom and examined within an hour or so. The condom is tied, placed in an envelope and carried in the patient's inside pocket for warmth until delivered for examination. In some cases it is feasible to have the patient collect a specimen by masturbation in a clean, wide-mouth jar in the physician's office. Huhner's method of collecting specimens from the vagina and cervix of the woman at varying intervals after intercourse is best carried out by the gynecologist.

Examination of the semen in any given case may reveal one of the following conditions:

1. That no semen is ejaculated (aspermia)
2. That ejaculation takes place but the semen is entirely lacking in sperm cells (azoospermia), or
3. Merely deficient in the number of spermatozoa (oligospermia)

4. That the sperm cells are dead (necropermia)
5. That the semen contains pus or blood, or finally,
6. That the semen appears normal.

A routine analysis of semen is simple and includes these details:

1. The average volume is 3 or 4 cc.
2. The hydrogen ion concentration varies from 7.7 to 8.5. Necropermia is occasionally associated with an acid hydrogen ion concentration.
3. A drop of semen is placed on a slide and the number of dead sperm cells estimated. Normal sperm cells are most tenacious of life, and a slide properly prepared to prevent evaporation will show motility of these cells for many hours.
4. The number of spermatozoa is determined by the use of the usual equipment for counting blood cells. A solution of sodium bicarbonate and phenol is used as the diluting fluid to destroy motility. The normal count is from 100 million to 150 million per cubic centimeter with a total count of from 400 to 500 million in an ejaculated specimen.
5. A smear stained with Gram's solution is next prepared and examined for abnormal forms. If more than 20 per cent of the forms are abnormal, the condition is pathologic. The technic is the same as for a differential white cell count.

Having determined that sperm cells are absent, the next step is to determine whether their absence is due to faults of production in the testicles or to some obstruction to the transmission of the sperm to the outside. If the testicles are grossly normal as to size, shape and consistency, they are almost invariably physiologically normal. Confirmation can, however, be made by needle puncture and aspiration of the testicle and globus major. If the aspirated specimen contains sperm cells and the ejaculated specimen contains none, obviously the sterility is obstructive in type. In many cases of obstructive sterility the condition disappears after infection of a prostatic or seminal vesicle is cured, as many of the occlusions are temporary and patency of the ducts is reestablished with subsidence of the infection. In a great many of these cases the infection is nonvenereal in type.

True loss of production of spermatozoa is usually a hopeless state. Testicular transplants and grafts invariably fail. This condition is often associated with various endocrine disturbances and also with secondary testicular atrophy, such as follows mumps, trauma, or maldescent of the testes. Decreased spermatogenesis due to constitutional depression usually is overcome with improvement in general health. Cases of relative or absolute sterility are not uncommon follow-

ing long illness, overwork or malnutrition, and in such cases the prognosis is good. The prognosis in cases of sterility due to endocrine disorders has improved in recent years, and better results may be expected with increasing knowledge and the purification of gonadotropic hormones. A small percentage of these cases respond now to treatment with the various gonadotropic hormones, such as antuitrin S from the urine of pregnancy and the gonadotropic hormone of pregnant mare's serum. These are pituitary hormones which tend to stimulate spermatogenesis by their action on the testicle.

The true male sex hormone testosterone, which is available as testosterone propionate under various trade names, depresses spermatogenesis rather than stimulates it. This fact reaffirms the old dictum that no organ is stimulated by its own secretion. Hypothyroid states must be thought of and properly managed. Vitamin deficiencies and malnutrition usually respond to adequate diet.

Sterility due to occlusion of the ejaculatory ducts or vas deferens from congestion, without true stricture, usually disappears with the subsidence of the infection and the reestablishment of the patency of the ducts. Cases of this type respond to prostatic massage or to catheterization of the ejaculatory ducts.

True stricture of the vas deferens usually occurs at either end of that structure, but is most commonly located where the vas joins the distal part of the epididymis. Organic stricture about this portion of the epididymis may be relieved by an epididymovasostomy. This procedure consists of anastomosis of the head of the epididymis to the vas above the stricture, thus shunting the spermatic flow around the contracted area. This operation was first performed by Dr. Edward Martin of Philadelphia in 1902. Hagner's modification of this operation is the usual procedure used now. Hagner claimed a cure in 63 per cent of his cases, but most surgeons are less fortunate. Finally, in the vast majority of cases of male sterility an accurate diagnosis of the type of sterility can be made, and in a great many of these cases the patient is benefited by proper treatment. Certainly cases of this kind are worth detailed study as they offer the promise that some good may come of it.

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

GILBERT S. OSINCUP, M.D., President.....Orlando
EUGENE G. PEEK, M.D., President-Elect.....Ocala
L. W. BLAKE, M.D., 1st Vice Pres.....Bradenton
LLOYD J. NETTO, M.D., 2nd Vice Pres.....W. Palm Beach
H. A. WALKER, M.D., 3rd Vice Pres.....Miami Beach
SHALER RICHARDSON, M.D., Sec'y-Treas.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D. P. II.....Jacksonville

BOARD OF GOVERNORS

J. ROCHER CHAPPELL, M.D., Chm...AL-43.....Orlando
JOHN R. BOLING, M.D., C-46.....Tampa
FREDERICK K. HERPEL, M.D., D-43.....W. Palm Beach
LOUIE M. LIMBAUGH, M.D., B-44.....Jacksonville
WALTER C. PAYNE, M.D., A-45.....Pensacola
J. SAM TURBERVILLE, M.D., PP-43.....Century
WALTER C. JONES, M.D., PP-44.....Miami
GILBERT S. OSINCUP, M.D. (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville
STEWART G. THOMPSON, D. P. II. (Advisory) Jacksonville

SCIENTIFIC WORK

HERBERT E. WHITE, M.D., Chm...B-43.....St. Augustine
CHARLES J. COLLINS, M.D., AL-43.....Orlando
DOUGLAS D. MARTIN, M.D., C-46.....Tampa
HOMER L. PEARSON, M.D., D-45.....Miami
JAMES H. POUND, M.D., A-44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAIK, M.D., Chm...AL-43 Jacksonville
HORACE A. DAY, M.D., B-45.....Orlando
WHITMAN C. MCCONNELL, M.D., C-46.....St. Petersburg
HENRY E. PALMER, M.D., A-44.....Tallahassee
JOSEPH S. STEWART, M.D., D-43.....Miami
GILBERT S. OSINCUP, M.D. (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, M.D., Chm...C-46.....Tampa
ROBERT D. FERGUSON, M.D., B-43.....Ocala
JESSE N. McLANE, M.D., A-44.....Pensacola
CAYETANO PANETTIERE, M.D., D-45.....Miami Beach
WALTER A. WEED, M.D., AL-43.....Orlando

PUBLIC RELATIONS

LEIGH F. ROBINSON, M.D., Chm...AL-43..Ft. Lauderdale
SIDNEY G. KENNEDY, M.D., D-43.....Pensacola
BAILEY B. SORY, M.D., D-44.....Palm Beach
JAMES L. STRANGE, M.D., B-46.....McIntosh
HARPER E. WHITAKER, M.D., C-45.....Tampa

NECROLOGY

GERRY R. HOLDEN, M.D., Chm...B-46.....Jacksonville
AUGUSTUS E. CONTER, M.D., A-43.....Apalachicola
GEORGE R. CREEKMORE, M.D., C-44.....Brooksville
JULIAN L. HARGROVE, M.D., AL-43.....Bartow
GERARD RAAP, M.D., D-45.....Miami

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm...B-46.....Jacksonville
W. WELLINGTON GEORGE, M.D., D-44.....W. Palm Beach
FRANK D. GRAY, M.D., AL-43.....Orlando
ROBERT B. HARKNESS, M.D., A-43.....Lake City
DAVID R. MURPHEY, M.D., C-45.....Tampa

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chm...D-45.....Miami
JAMES M. HOFFMAN, M.D., A-46.....Pensacola
HEWITT JOHNSTON, M.D., B-44.....Orlando
JOHN N. MOORE, M.D., AL-43.....Ocala
R. WYNN S. OWEN, M.D., C-43.....St. Petersburg

MEDICAL ECONOMICS

HARRISON A. WALKER, M.D., Chm...D-45 Miami Beach
HERBERT L. BRYANS, M.D., AL-43.....Pensacola
FRANCIS T. HOLLAND, M.D., A-43.....Tallahassee
EDWARD JELKS, M.D., B-44.....Jacksonville
JOSEPH W. TAYLOR, M.D., C-46.....Tampa

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm...B-43.....Jacksonville
ELMO D. FRENCH, M.D., D-45.....Miami
LEO C. GONZALEZ, M.D., AL-43.....Tampa
ALVIN L. MILLS, M.D., C-46.....St. Petersburg
JOE I. TURBERVILLE, M.D., A-44.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm...D-45.....Ft. Lauderdale
WILLIAM M. DAVIS, M.D., C-46.....St. Petersburg
DANIEL A. MCKINNON, M.D., AL-43.....Marianna
JOHN E. MAINES, JR., M.D., B-44.....Gainesville
RUFUS THAMES, M.D., A-43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

WILLIAM C. BLAKE, M.D., Chm...C-46.....Tampa
EARLSWORTH C. BRUNNER, M.D., D-45.....Miami
J. MAXEY DELL, JR., M.D., B-44.....Gainesville
DUNCAN T. McEWAN, M.D., AL-43.....Orlando
ROBERT G. NOBLES, M.D., A-43.....Pensacola

STATE CONTROLLED MEDICAL INSTITUTIONS

H. MASON SMITH, M.D., Chm...C-46.....Tampa
BENJAMIN F. BARNES, M.D., AL-43.....Chattahoochee
HARRY S. HOWELL, M.D., A-43.....Lake City
ROBERT T. SPICER, M.D., D-44.....Miami
ROLLIN D. THOMPSON, M.D., B-45.....Orlando

MATERNAL WELFARE

SAMUEL R. NORRIS, M.D., Chm...AL-43.....Jacksonville
LAURIE L. DOZIER, M.D., A-45.....Tallahassee
ISAAC M. HAY, M.D., B-43.....Melbourne
RALPH W. JACK, M.D., D-46.....Miami
W. WARDLAW JONES, M.D., C-44.....Dade City

CHILD HEALTH

GEORGE L. COOK, M.D., Chm...AL-43.....Tampa
THOMAS M. PALMER, M.D., B-44.....Jacksonville
WARREN W. QUILLIAN, M.D., D-45.....Coral Gables
COUNCILL C. RUDOLPH, M.D., C-46.....St. Petersburg
ALVYN W. WHITE, M.D., A-43.....Pensacola

CONSERVATION OF VISION

SHALER RICHARDSON, M.D., Chm...B-46.....Jacksonville
CARL E. DUNAWAY, M.D., D-44.....Miami
SHERMAN B. FORBES, M.D., C-45.....Tampa
HOLLIS C. INGRAM, M.D., AL-43.....Orlando
WILLIAM S. NICHOLS, M.D., A-43.....Lake City

ADVISORY TO WOMAN'S AUXILIARY

GEORGE C. TILLMAN, M.D., Chm...B-46.....Gainesville
LUTHER C. FISHER, M.D., A-43.....Pensacola
JOHN D. HAGOOD, M.D., C-44.....Clearwater
LAWRENCE C. INGRAM, M.D., AL-43.....Orlando
ARTHUR L. WALTERS, M.D., D-45.....Miami Beach

REPRESENTATIVES TO INDUSTRIAL COUNCIL

RICHARD H. WALKER, M.D., Chm...B-44.....Orlando
THOMAS H. BATES, M.D., AL-43.....Lake City
JULIUS C. DAVIS, M.D., A-43.....Quincy
R. RENFRO DUKE, M.D., C-45.....Tampa
FERDINAND A. VOGT, M.D., D-46.....Miami

COUNCILOR DISTRICTS AND COUNCILORS

W. DUNCAN OWENS, M.D., Chm...AL-43..Miami Beach
First—COURTLAND D. WHITAKER, M.D., 1-43 Marianna
Second—WILLIAM D. ROGERS, M.D., 2-44 Chattahoochee
Third—LUCIEN Y. DYRENFORTH, M.D., 3-43 Jacksonville
Fourth—MEREDITH MALLORY, M.D., 4-44.....Orlando
Fifth—LELAND F. CARLTON, M.D., 5-44.....Tampa
Sixth—S. EDGAR WATSON, M.D., 6-43.....Lakeland
Seventh—LLOYD J. NETTO, M.D., 7-43 West Palm Beach
Eighth—ELBERT McLAURY, M.D., 8-44.....Hollywood

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
GILBERT S. OSINCUP, M.D.....Orlando
SHALER RICHARDSON, M.D.....Jacksonville

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate.....West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM P. ADAMSON, M.D., Chairman, 1920...Tampa
J. SAM TURBERVILLE, M.D., Secretary, 1940...Century
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902...Pensacola
HENRY E. PALMER, M.D., 1909...Tallahassee
ROBERT H. MCGINNIS, M.D., 1915...Jacksonville
FREDERICK J. WALTER, M.D., 1918...San Diego, Calif.
WILLIAM E. ROSS, M.D., 1919...Jacksonville
H. MARSHALL TAYLOR, M.D., 1923...Jacksonville
JOHN C. VINSON, M.D., 1924...Tampa
JOHN S. McEWAN, M.D., 1925...Orlando
H. MASON SMITH, M.D., 1926...Tampa
JOHN A. SIMMONS, M.D., 1927...Arcadia
FREDERICK J. WAAS, M.D., 1928...Jacksonville
HENRY C. DOZIER, M.D., 1929...Ocala
JULIUS C. DAVIS, M.D., 1930...Quincy
GERRY R. HOLDEN, M.D., 1932...Jacksonville
WILLIAM M. ROWLETT, M.D., 1933...Tampa
HOMER L. PEARSON, M.D., 1934...Miami
HERBERT L. BRYANS, M.D., 1935...Pensacola
ORION O. FEASTER, M.D., 1936...St. Petersburg
EDWARD JELKS, M.D., 1937...Jacksonville
W. HENRY SPIERS, M.D., 1938...Orlando
LEIGH F. ROBINSON, M.D., 1939...Ft. Lauderdale
WALTER C. JONES, M.D., 1941...Miami

The Journal of The Florida Medical Association

Owned and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D. *Orlando*
FRANK C. METZGER, M.D. *Tampa*
MILLEN A. NICKLE, M.D. *Clearwater*
HOMER L. PEARSON, M.D. *Miami*
J. H. POUND, M.D. *Tallahassee*
W. McL. SHAW, M.D. *Jacksonville*

COMMITTEE ON PUBLICATION

HERMAN WATSON, M.D., Chairman *Lakeland*
WARREN W. QUILLIAN, M.D. *Coral Gables*
SHALER RICHARDSON, M.D. *Jacksonville*

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman *Jacksonville*
THEODORE F. HAHN, M.D. *Deland*
COUNCIL C. RUDOLPH, M.D. *St. Petersburg*

ANNUAL CONVENTION

The Palm Beach County Medical Society entertained royally the doctors and guests who attended the Sixty-Ninth Annual Convention of the Association. Owing to present conditions, a great many were surprised to learn that the attendance was approximately 775. The official figures and a complete writeup of the annual convention, proceedings of the House of Delegates, annual reports of officers and committee chairmen, together with Echoes of the Convention, will appear in an early issue of the Journal.

In this Journal may be found the names of the newly elected officers, President Osincup's new assignments to the Association's standing committees, and the editorial staff. There are now four medical districts and eight councilor districts, as is shown by the arrangement of the new committee appointees.

WORDS

Medical histories are admittedly of great value in the diagnosis and treatment of disease. It nevertheless becomes increasingly difficult to obtain a clear concise history for reasons largely beyond the physician's control. There is, for example, the hindrance growing out of the misconception and half knowledge that patients get from so-called medical articles for the laity; too, there are the difficulties arising from the layman's misinterpretation of articles descriptive of disease and its treatment that are in themselves scientifically correct.

The physician, however, not infrequently thwarts the objective of obtaining a correct history by the loose use of words. While it is true that patients freely exercise the privilege of misusing, misquoting and misunderstanding his

terms, he in turn occasionally employs descriptive language so vague and inappropriate that the actual meaning is obscured both to him and to the intelligent patient as well as to the patient who is often ignorant and opinionated.

Too many patients expect a whole medical education from one visit to the physician. In consequence, the busy practitioner is prone to put them off with expressions not entirely applicable. He feels, and with justice, that diagnosis and treatment should be left to him, but he fails to realize that patients of this type delight to tell the world what he said, oftentimes to his embarrassment in the future.

The chief trouble maker in this particular is the marginal M. D., who, under the cloak of a medical degree frequently obtained from one of the best medical schools, descends for purely financial reasons to the level of the worst charlatan or quack. He lacks even the veil of ignorance to excuse his varied and unscrupulous methods. Illustrative of thousands of examples is the advice of Dr. So and So to Mrs. Blank: "Your white cells outnumber your red cells; so you must have my special injections." This without even the formality of a blood count! His differential diagnosis between a chancre and a chancroid also has a cash basis. If the patient has \$150, the lesion is diagnosed as syphilis with the prescribed treatment requiring a long course of "shots;" if not, it becomes a chancroid requiring only the application of a little calomel ointment. Likewise traceable to the medical racketeer are such terms as "too much acid," "acid bumps," "acid headache," "bordering on Bright's disease" and "your blood is thin."

Medical ethics was not designed to help such a practitioner, be he an M. D. associated with the county medical society, or simply an advertising quack. Persistent and hard hitting methods must be employed to wipe out this type of physician. Proof of charlatanism for legal purposes is difficult if not impossible to obtain. Uncovering it is the problem of the profession. If the unethical practitioner remains in a community, he and his methods soon become known to the local honest physicians, who should expose him to the patient in emphatic terms every time occasion offers. Such a campaign will hurt him a great deal and will tend to throw into one class or the other the physician who occasionally indulges in racketeering practices.

Concerted effort of this sort will also impose upon the ethical practitioner the necessity of

guarding his speech by using only those terms actually applicable to the conditions that arise. Once that habit is established, the temptation to use loose phrases, usually yielded to in moments of fatigue or disgust merely to satisfy the patient, will be readily resisted. It is certainly better to tell a patient nothing than, for example, to reiterate the oft repeated expression: "Oh, you just caught a fresh cold on top of the one you had."

Naturally this avenue of approach to a clear concise medical history will be reflected in actual practice only after the expenditure of much time, effort and patience. If persisted in, it should, however, have two highly desirable results. It should help to draw a sharp line of distinction between the honest physician and the relatively few dishonest practitioners of the type described, thus tending to make the racketeer watch his step or stop his thievery. Also, it should give one's medical colleagues a better chance to obtain a clear reliable medical history.

The results should be readily and gratifyingly apparent. The "cold" will thereby return to its original meaning of an acute coryza and thus spare the physician the necessity of guessing at the medical significance of such complaints as "a cold in the back" and "spitting up a lot of cold." The word pleurisy, its true descriptive value of great worth at a later time in the diagnosis of pulmonary tuberculosis, will again come into its own and no longer be used to describe a muscular pain anywhere from the apexes of the lungs to the region of the umbilicus.

Acidosis will also come to have a real meaning. After a long time such expressions as "acid all through my system," "acid bumps" and "acid taste in my mouth" will cease to plague the physician. "A spot on my lung" will then have to be discarded in favor of a suitable expression having definite meaning. Ménière's disease will likewise once more designate the one acute syndrome described by Ménière and will no longer masquerade as the pseudonym for every degree of lightheadedness and vertigo arising from innumerable causes, which include worshipping too freely at the shrine of Bacchus.

It is well to bear in mind that what a physician says or does is quoted with surprising frequency to settle almost any kind of an argument that may arise in ordinary conversation. While he cannot hope to stop being misquoted to some extent, nevertheless by the exactness of his

language he can make a worth while contribution toward stopping the loose use of words and thus render a constructive service to his patients, to his colleagues and, broadly speaking, to the general public.

MARRIAGES AND DEATHS

MARRIAGES

Dr. Earl C. MacCordy and Miss Regina Barbara Melber of St. Petersburg were married on March 4.

DEATHS

Dr. Jack Halton of Sarasota died in St. Petersburg on February 26.

STATE NEWS ITEMS

Dr. Kenneth Phillips of Miami, secretary of the Southeastern Section of the American Congress of Physical Therapy, announces that the annual meeting, scheduled for Memphis in May, has been postponed due to wartime conditions. The officers request that physicians interested will attend the new Section on Physical Medicine of the Southern Medical Association, now scheduled to meet in Richmond in November.

The Annual Conference of the Florida Tuberculosis and Health Association will be held at the Tampa Terrace Hotel, Tampa, May 18 and 19. The program will include pertinent subjects on tuberculosis important and timely in a world at war. The association will bring to the conference a nationally known speaker for the scientific sessions. Details will be announced later. Florida physicians are cordially invited to attend the sessions.

Dr. Frederick J. Waas of Jacksonville was elected vice president of the Southeastern Surgical Congress at its meeting held in Atlanta, March 9, 10 and 11. In addition to Dr. Waas, the following Florida doctors attended the meeting: J. L. Hargrove, Bartow; T. A. Snow, Gainesville; J. W. Sapp, Havana; Gerry R. Holden, Jacksonville; H. G. Holland, Leesburg; C. D. Whitaker, Marianna; A. J. Harness, Miami; Eugene G. Peek, Ocala; F. D. Gray, Orlando; A. H. Lisenby, Panama City; S. G. Kennedy, Pensacola; A. Lamar Matthews, Sarasota; J. H. Pound, Tallahassee; and H. G. Cole, Tampa.

(Continued on page 498)

MEDICAL POSTGRADUATE COURSE

FLORIDA'S SHORT COURSE COMMENDED

The Annual Graduate Short Course for Doctors of Medicine in Florida received favorable mention in a recent issue (Feb. 14) of the Journal of the American Medical Association in an article by Dr. Paul B. Cornely, "Opportunities for Postgraduate Study for Negro Practicing Physicians in the South." Doctor Cornely stated that only 12 of the 17 Southern states have developed formal postgraduate programs for Negro physicians and that most of these are sponsored by white agencies. He continued:

Thus it is seen that white organizations, particularly the medical schools and voluntary health agencies, have been more active in this field of endeavor than Negro groups. Of particular significance is the fact that four Southern state medical societies, namely, Arkansas, Florida, Louisiana and Tennessee, have opened certain of their postgraduate facilities to Negro physicians. The attitude of the Florida Medical Association, Inc., is commendatory and deserves a place of prominence. Up to 1940, Negro physicians were not admitted to the one week postgraduate seminar held annually by the society since 1933. In 1940 the last two days of the seminar were opened to Negro physicians and in 1941 the whole course was made available to all duly licensed Negro physicians on the same basis as white physicians. This arrangement has proved satisfactory and should certainly be given a trial by other state

medical societies.

In his summarizing comment, Doctor Cornely further remarked:

The examples which have been set by the state medical association of Florida and those of Arkansas, Louisiana and Tennessee should gradually cause other Southern state and county medical societies to open some of their postgraduate activities to Negro physicians. Just as the Florida Medical Association, Inc., gradually opened its postgraduate seminar to Negro physicians in the state, so other associations could experiment in this direction.

SHORT COURSE SCHEDULED FOR JUNE 22-27

The George Washington Hotel in Jacksonville has again been chosen for the Graduate Short Course for Doctors of Medicine in Florida, which will be held June 22-27, inclusive. The fact that this hotel is fully air-conditioned insures the comfort of those attending the session.

SHORT COURSE FACULTY

Dr. Nicholson J. Eastman, Professor of Obstetrics at Johns Hopkins University School of Medicine, is the only member of last year's faculty who will return this year. He will again present the course in Obstetrics, which will come the last three days of the session, June 25, 26, and 27. Doctor Eastman's presentation of these lectures last year will be remembered with pleasure.

The course in Surgery will be given by Dr. Alton Ochsner, Professor of Surgery, Tulane University. Doctor Ochsner will be the first faculty member from Tulane in a number of years.

Dr. Soma Weiss, who, prior to his lamented death on January 31, was professor of Medi-

CONGRATULATIONS!

The following letter has been received by the Medical Postgraduate Course Committee:

Chicago, March 12, 1942.

Dr. T. Z. Cason, Chairman,
Medical Postgraduate Course Committee,
Florida Medical Association,
Jacksonville, Florida

My dear Dr. Cason:

May I, as secretary of the Council on Medical Education and Hospitals of the American Medical Association, express to you and to the Florida Medical Association greetings and congratulations on the occasion of the tenth anniversary of the Annual Graduate Short Course for Doctors of Medicine in Florida.

Some one has said that the measure of a man is his conduct when he is free to do as he pleases. The successful conduct of such annual courses, invoking as they do no compulsion for attendance, for a period of ten years is in itself a fine tribute to the practicing physicians of Florida and to your association. This is especially true because of the fact that your state has no medical school and thus does not have any organized groups whose chief responsibility is that of teaching.

The success of continuation study programs for practicing physicians is dependent largely on the interest and activity of component medical societies and the Council has found that with few exceptions the best attended and, in the opinion of many physicians, the most useful educational projects are those actively directed by well organized medical societies.

The Council's recent study of continuation courses for the practicing physician showed that only twenty-six of fifty statewide courses were of five or more days duration. Your association can take pride in the fact that you are listed among this group of twenty-six.

May I also congratulate you on the work that is being done in your state in connection with the graduate education of the Negro physician as reported by Dr. Paul B. Cornely in a recent number of The Journal of the American Medical Association.

At this particular time when greatly added responsibilities are being thrust upon the practicing physicians of this country your annual course takes on added importance and should be especially beneficial and stimulating to all who attend.

With every good wish for a successful anniversary session, I am

Sincerely yours,

H. G. WEISKOTTEN, Secretary.

cine at Harvard University School of Medicine, had promised to present the lectures in Medicine this June. After he died the Committee requested that someone from his staff be sent to give the course, and Doctor Weiss' widow suggested Dr. Robert Wilkins who had been closely associated with Doctor Weiss for many years and who is assistant Professor of Medicine at Harvard University Medical School. Doctor Wilkins has kindly accepted the assignment.

The instructors in Gynecology, Venereal Diseases, and Pediatrics will be announced later.

Dr. Terry Bird, Director of the State Crippled Children's Commission, is now at the University of North Carolina, Chapel Hill, to complete his Master's Degree in Public Health. He will receive his degree in June of this year.

Dr. Louis M. Orr of Orlando was named president of the Southeastern Section of the American Urological Association at its annual meeting held in Chattanooga, March 19 to 21. Dr. Robert B. McIver of Jacksonville was appointed a member of the Executive Committee. Other Florida doctors attending the meeting were: Russell B. Carson, Ft. Lauderdale; B. F. Woolsey, Jacksonville; Clyde F. Bowie, Leesburg; James L. Estes and E. S. Gilmer, Tampa.

JACK HALTON

Dr. Jack Halton of Sarasota died at the Bay Pines Veterans Hospital, St. Petersburg, on February 26, at the age of 73.

Recipient of the American Legion community service award in 1932 in recognition of his work in the Legion's underprivileged child clinic, Dr. Halton had been closely identified with the activities of Sarasota Bay Post No. 30 and other local organizations until ill health interfered.

He was described as a man who "has rendered an invaluable service to this community in his work of treating and otherwise assisting underprivileged children," when he was presented with the Legion award, the second ever given in that city.

Dr. Halton was born in Lancashire, England, in March, 1868. At the age of 14 he entered the English navy as midshipman and he continued his service in that organization until 1890 when he came to the United States.

Dr. Halton received his medical training in the Miami Medical College, Cincinnati, from which he was graduated in 1895. He then practiced medicine in Cincinnati and Muncie, Ind., until 1904 when he came to Sarasota. For three years in addition to his practice, he conducted the Alton Sanitarium, owned by the late Col. John Hamilton Gillespie, and also was proprietor of the Belle Haven hotel. In August, 1917, Dr. Halton tendered his services to the medical corps of the United States army and was commissioned a captain. He also assisted in the organization of the United States Public Health Service in which he

served at Greenville, S. C., until September, 1919.

He was a past commander of the Sarasota Legion post, vice commander of the state Legion and was a former city councilman and city physician.

Survivors include his widow, Mrs. Winifred L. Halton; one son, City Councilman Jack (Zip) Halton now stationed with the naval reserve at St. Petersburg; and three daughters, Mrs. Ed Roth of Sarasota, Miss Edith Halton of Tampa, and Mrs. Ned Roberts of Atlanta.

COMPONENT COUNTY SOCIETIES

BROWARD

The Broward County Medical Society, with a membership of 40, has paid 100 per cent of its state dues for 1942. Dr. Elbert McLaury of Hollywood is president, Dr. D. W. Harris of Ft. Lauderdale, vice president and Dr. O. C. Brown of Ft. Lauderdale, secretary and treasurer of the society.

DADE

Dr. Joseph H. Barach, head of the Falk Diabetic Clinic, Medical Center, University of Pittsburgh, was the principal speaker at the meeting of the Dade County Medical Society held on April 1. He discussed "Diabetes Mellitus, the Most Scientifically Treated of all Medical Diseases," and illustrated his lecture with films and slides.

ESCAMBIA

At a meeting of the Escambia County Medical Society held on March 10, two prominent physicians were principal speakers. Lt. Comdr. R. S. Crisbell, MC., U.S.N.R., who is on leave of absence as professor of neuropsychiatry at Duke University School of Medicine, spoke on the recent advances in the neuromedical field. Dr. Willard Bartlett, St. Louis, associate professor of surgery at Washington University, discussed "A Concept of Thyrotoxicosis."

JACKSON

The Jackson County Medical Society has paid its entire assessment for 1942. Officers of this society are: Dr. W. R. Wandeck of Marianna, president; Dr. C. H. Ryals of Grand Ridge, vice president, and Dr. R. N. Joyner of Marianna, secretary and treasurer.

LEON-GADSDEN-LIBERTY-WAKULLA-
JEFFERSON

In honor of Dr. Morris Fishbein, editor of the Journal of the American Medical Association, the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society held a dinner at the Floridan Hotel on the evening of March 11. Dr. Fishbein spoke on "American Medicine and the War." The following evening, he addressed the hygiene students of the Florida State College for Women on "Medicine and Defense."

MADISON-SUWANNEE

The Madison-Suwannee County Medical Society has paid 100 per cent of its dues for 1942. Dr. Eustace Long of Madison is president of the organization and Dr. E. D. Thorpe of Madison is secretary and treasurer.

PALM BEACH

Dr. Frank H. Lahey, president of the American Medical Association, was guest speaker at a meeting of the Palm Beach County Medical Society held on February 23.

Dr. Lahey, who also is directing chairman of the physicians' procurement and assignment service for the armed forces of the United States, devoted the first part of his talk to an explanation of the system that has been devised to obtain physicians for the Army, Navy and Public Health Services in the present emergency.

In the second half of his lecture, Dr. Lahey, who heads the Lahey Clinic in Boston, spoke on "Diagnosis and Surgical Treatment of Cancer."

PASCO-HERNANDO-CITRUS

Dr. and Mrs. P. J. Hudson of Crystal River entertained the members of the Pasco-Hernando-Citrus County Medical Society at their home on the evening of March 12, at a fish and oyster supper. The scientific meeting was held in the doctor's office. Present were Dr. Claude L. Carter, Inverness; Dr. W. Wardlaw Jones, Dade City; Dr. W. B. Moon, Crystal River; Dr. S. C. Harvard and Dr. G. R. Creekmore of Brooksville. Dr. Smith L. Turner of Williston was a guest of the society.

This society has paid 100 per cent of its dues for the current year. It is headed by the following officers: president, Dr. J. T. Bradshaw, San Antonio; vice president, Dr. C. L. Carter, Inverness; and secretary-treasurer, Dr. G. R. Creekmore of Brooksville.

PINELLAS

The monthly dinner meeting of the Pinellas County Medical Society was held on the even-

ing of March 6. The scientific program consisted of two papers: "Rational Vitamin Therapy" by Dr. Lawrence Simcox and "Mineral Balance of the Body" by Dr. F. F. Kumm.

On March 20 the Society held a round table conference at the home of Drs. O. O. Feaster and Annette M. Feaster on the subject of cardiac disease. Dr. R. J. Needles acted as moderator.

The Pinellas County Medical Society is at present the largest unit of the Association having 100 per cent of membership dues paid for the current year.

POLK

Dr. Paul White, president of the National Heart Association, was principal speaker at a meeting of the Polk County Medical Society held at the Walesbilt Hotel, Lake Wales. Approximately 70 members and guests attended the meeting.

ST. LUCIE-OKEECHOBEE-INDIAN RIVER-MARTIN

The St. Lucie-Okeechobee-Indian River-Martin County Medical Society is 100 per cent paid for 1942. Officers of this group are: president, Dr. R. C. Boothe, Ft. Pierce; vice president, Dr. E. B. Hardee, Vero Beach; secretary and treasurer, Dr. A. M. Sample, Ft. Pierce.

SARASOTA

A joint meeting of the Sarasota and Manatee County Medical Societies was held on the evening of February 17. At this time Major W. E. McCormick, chairman of health and housing of the Sarasota County Defense Council, discussed the establishment of emergency first aid posts and casualty stations. Dr. L. W. Blake of Bradenton spoke on the Manatee county medical defense setup. Dr. Frederick Hammett, research director of the Lakenow Cancer Research Foundation, screened motion pictures of the work now going on in the foundation.

SEMINOLE

The Seminole County Medical Society stands 100 per cent paid for the current year. Heading this society are: Dr. Charles L. Park, Sanford, president; Dr. George H. Putnam, Sanford, vice president; and Dr. Orville L. Barks, Sanford, secretary-treasurer.

VOLUSIA

Dr. Harry Hausman of Daytona Beach was the principal speaker at a meeting of the Volusia County Medical Society held on March 10 at the Halifax Hospital. His subject was "Tuberculosis of the Kidney."

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

BUREAU OF
PROFESSIONAL
RELATIONS

University of Florida—School of Pharmacy

IRON THERAPY

Tests of relative efficiency of inorganic iron compounds in hypochromic anemia are misleading, since small differences can be readily compensated by the dosage. Fullerton¹ tested a number of iron compounds, making a comparison on the basis that a 1 per cent rise in hemoglobin level contains about 24 mg. of iron. The preparations studied gave practically the same improvement if effective doses were used.

The effective daily dosage (to utilize 30 mg. of iron), according to Fullerton,¹ would be 80 grains of iron and ammonium citrate, 6 grains of ferrous chloride, 25 grains of mass of ferrous carbonate (Blaud's pills), or 8 grains of ferrous sulfate. The difference in dosage corresponded to the difference in utilization.

It has been shown that gastric acidity favors preservation and even formation of ferrous iron and prevents formation of insoluble iron compounds. Covering ferrous sulfate tablets with an enteric coat would seem actually to lessen absorption of ferrous iron as most enteric coated tablets (theoretically) disintegrate in slightly alkaline media.

Iron, it is claimed, can only be utilized in the presence of minute quantities of copper. Further, it has been shown experimentally that copper hastens the mobilization of reticulocytes from the bone marrow.² "Practically, however, copper with iron is unimportant because we get all we need in our food and even as impurities in iron."³ Sollmann⁴ stated that the optimal dose of copper is so small that extreme precautions are taken to exclude it from iron to demonstrate its effect.

Apparently ferrous sulfate is the drug of choice in hypochromic anemia not because of any difference in efficiency, but because it is inexpensive, more easily tolerated in most cases and can be given effectively in small doses.

Where a liquid prescription is advantageous ferrous sulfate can be made permanently stable in solution by the addition of citric acid and simple syrup (elixir ferrous sulfate).

1. Fullerton, H. W.: Iron, *Edinburgh M.J.*, **11**: 99 (1934).

2. McHargue, J. S.; Healy, D. J., and Hill, E. S.: The Relation of Copper to the Hemoglobin Content of Rat Blood, *J. Biol. Chem.* **78**:637 (1928).

3. Conferences on Iron Therapy, *J.A.M.A.*, **114**:2212 (1940).

4. Sollmann, T.: Pharmacology, 1038 (1942).

IMPERFORATE HYMEN BEFORE THE MENARCHE WITH MUCOCOLPOS AND MUCOMETRIUM, BOWEN, FRED H., JACKSONVILLE, AM. J. OBST. & GYNEC. **42**:144-145 (JULY) 1941.

A Jewish girl, 12 years of age, complained of mild discomfort without pain in the right lower quadrant and midabdomen. Examination revealed a large mass in the right side of the abdomen, extending from the pelvis to the umbilicus. Between the labia there was a white spherical mass, more prominent on straining. An incision through the hymen resulted in the escape of two quarts of chylelike fluid. Examination of the cervix thirteen days after the patient was discharged revealed a slight mucoid secretion from the cervix.

The interesting feature of the case is its occurrence prior to the onset of menstruation and the author surmises that in some of the cases reported, in which from 500 to 1000 cc. of bloody fluid has been evacuated after only one or two menstrual months, the condition may be a mucocolpos and mucometrium of long standing.



THE CHEMOTHERAPY OF INFECTIOUS DIARRHEA WITH SULFATHIAZOLE, ANDERSON, E. V., PENSACOLA, J. PEDIAT. **18**:732-736 (JUNE) 1941.

The author presents a summary of results obtained by the use of sulfathiazole in both infectious and non-infectious diarrheas during 1940, and contrasts them with results of treatment in these conditions during the decade 1930-1939, before the advent of sulfathiazole. No death occurred during 1940 from either condition, whereas in the former decade 39 of 113 patients with infectious diarrhea and 15 of 111 with non-infectious diarrhea died. The author's statistics also seem to show a shorter period of morbidity and hospitalization when the drug is used.

The dosage was computed on the basis of from 1 to 1.5 grains per pound of body weight daily.



Dr. Randolph's Sanitarium

JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

86c out of each \$1.00 gross income used
for members' benefit

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE



For Ethical Practitioners Exclusively
(56,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	For \$64.00 per year
\$10,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$50.00 weekly indemnity, accident and sickness	For \$96.00 per year
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	For \$96.00 per year

40 years under same management

\$2,220,000 INVESTED ASSETS
\$10,750,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for
protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability
Disabilities occasioned by war are covered in full.

Send for application, Doctor, to
400 First National Bank Building
OMAHA, NEBRASKA

Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, every two weeks throughout the year. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses. Rectal Surgery every week.

MEDICINE—Two Weeks Intensive Course will be offered starting June 1st and October 5th. Two Weeks Course in Gastro-Enterology will be offered starting June 15th and October 19th. Two Weeks Intensive Course in Electrocardiography and Heart Disease starting August 3rd.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting May 4th, June 29th and September 21st. Informal course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting June 15th and October 19th. One Month Personal Course starting August 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting October 5th. Three Weeks course starting May 25th and August 10th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting September 14th. Clinical and Special Courses every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered starting September 28th. Five Weeks Course in Refraction Methods starting May 11th and October 19th. Informal Course every week.

ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

ADVERTISERS' NOTES

DR. DARBY, NOTED SCIENTIST IN VITAMIN FIELDS, ON BORDEN STAFF

The Borden Vitamin Company, which has been bringing into its fold a number of research and production leaders in that field, announces that Dr. Hugh H. Darby, distinguished Columbia scientist and author of many authoritative works, has joined its staff for research and development in the production and application of vitamins and hormones.

Dr. Darby, who has been with the Department of Biochemistry of the College of Physicians and Surgeons for the past seven years as research associate, is a specialist there on vitamins and hormones, achieving wide attention for his work on the extraction and physiology of sex hormones.

Among other distinctions, Dr. Darby is noted as the discoverer of the existence of Vitamin D in plant life, and for his spectrographic research on vitamins A, D and K. He originated the system, widely used by the Department of Agriculture, of heat treatment for the destruction of harmful insects.

Announcement of Dr. Darby's new activities was made by Charles F. Kieser, vice president of The Borden Company and president of The Borden Vitamin Company, a division that has been expanding its activities widely in the production of vitamins.



GLASS

Glass, the supercooled liquid we see through and put to a thousand different uses, was once chipped into axes, knives, spear and arrow heads by Stone Age warriors to mow down their enemies, according to Dr. E. D. Tillyer, American Optical Company research director.

Millions of years ago, he explained, nature's glass furnaces, volcanoes, fused together alkali, alumina and silica to form a natural silicate glass that is exceptionally hard and resistant to weathering, properties the Stone Age blitzkriegers put to lethal use.

This natural substance, states the scientist, would make a superior glass for most uses if it were not so difficult to melt. Accordingly, glass makers have been compelled to imitate nature by creating a workable artificial glass, accomplishing this by substituting lime for the alumina.

In the Yellowstone Park, he reports, a mass of glass is exposed to view, about nine miles long and four miles wide. Known as Obsidian Cliff, this phenomenon is probably a lava flow. At one time serious consideration was given to cutting a glass disk out of this cliff for the 200-inch telescope of the California Institute of Technology.

According to Dr. Tillyer, these volcanic glasses are fairly common in many regions of the earth's crust. However, they are so impure that special treatment would be necessary to obtain a clear transparent glass. The resulting cost of manufacture is prohibitive, otherwise it would be possible to quarry and melt this bountiful supply of natural glass and make it serve civilization.



WAR OR NO WAR

Depression or no depression, in good times and in bad, Mead Johnson & Company are keeping the faith with the medical profession. Mead Products are not advertised to the public. If you approve this policy, please specify *Mead's*.

Miami Retreat, Inc.

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

An eleemosynary or not-for-profit institution. Well equipped for the individual treatment and management of all types of patients.

Special rates may be arranged for persons in straitened circumstances by correspondence.

AIR CONDITIONED



North Miami Ave. at 79th St.

Telephone 7-1824

Resident and Consulting Neuropsychiatrists

Everhart Surgical Supply Co.

493 Peachtree St. N. E.

ATLANTA, GA.

We have been serving the Medical Profession in Florida and Georgia for over a quarter-century, successfully and satisfactorily.

G. I. BUTZER, *Florida representative*
45 E. WINTER PARK AVE., ORLANDO

*We will be glad to see you at the Palm Beach
Convention in April — Booth 35*

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS

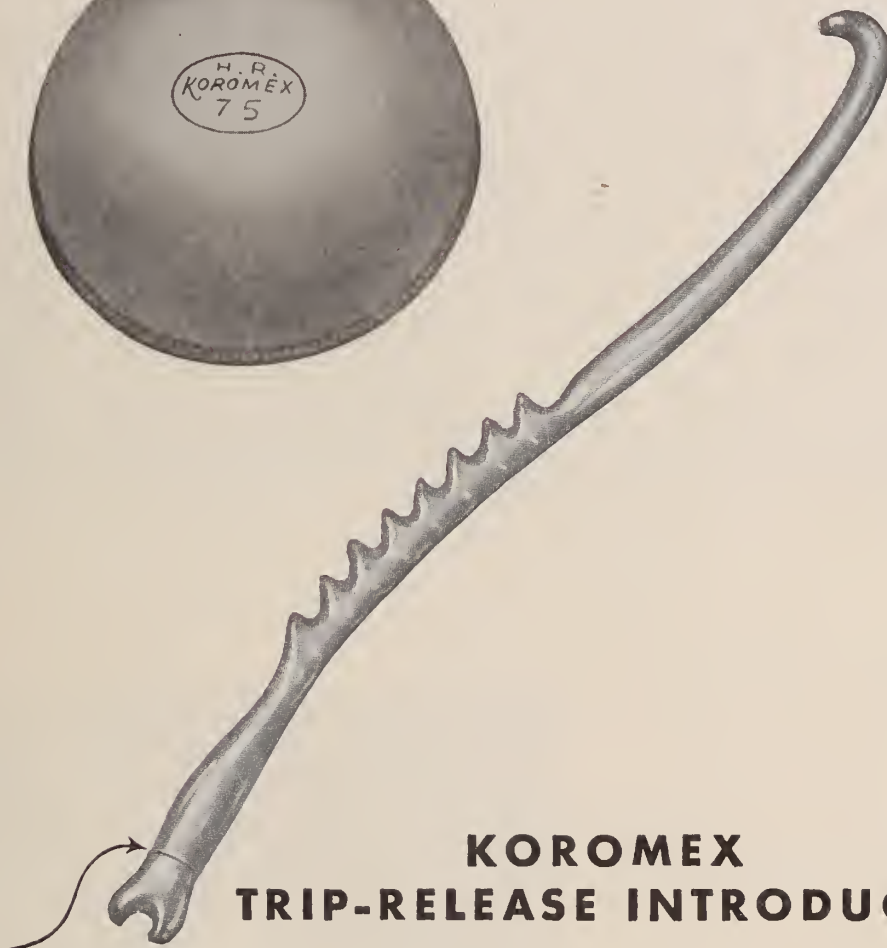
TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

KOROMEX DIAPHRAGM



KOROMEX TRIP-RELEASE INTRODUCER

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. W. J. BARGE, President.....Miami
 MRS. F. W. KRUEGER, First Vice-President.....Jacksonville
 MRS. R. L. CLINE, Second Vice-President.....Lakeland
 MRS. PAUL KELLS, Corresponding Secretary.....Miami
 MRS. H. A. LEAVITT, Recording Secy.-Treas.....Miami
 MRS. M. J. FLIPSE, Historian.....Miami
 MRS. L. C. INGRAM, Parliamentarian.....Orlando

COMMITTEE CHAIRMEN

MRS. S. M. COPELAND, Press and Publicity.....Jacksonville
 MRS. P. J. MANSON, Hygeia.....Miami
 MRS. RUPERT STOVALL, Public Relations....Ft. Lauderdale
 MRS. E. M. HENDRICKS, Legislation.....Ft. Lauderdale
 MRS. GORDON H. IRA, Finance.....Jacksonville
 MRS. T. C. KENASTON, Exhibits.....Cocoa
 MRS. CLYDE ANDERSON, Archives.....St. Petersburg
 MRS. GEORGE C. TILLMAN, Student Loan....Gainesville
 MRS. F. W. KRUEGER, Program.....Jacksonville
 MRS. R. L. CLINE, Organization.....Lakeland
 MRS. JOHN H. OWENS, Bulletin.....Jacksonville

DISTRICT CHAIRMEN

MRS. G. C. TILLMAN, North Central "B"....Gainesville
 MRS. E. W. VEAL, Northeast "C".....Jacksonville
 MRS. J. C. GRIFFIN, Southwest "D".....Tampa
 MRS. W. C. PAGE, South Central "E".....Cocoa
 MRS. HILLARD WILLIS, Southeast "F".....Coral Gables

NATIONAL CONVENTION

The following announcement has been sent to us from Mrs. David B. Allman, Convention chairman, Atlantic City, New Jersey.

Haddon Hall will be the headquarters for the Annual Meeting of the Woman's Auxiliary to the American Medical Association, which will be held in Atlantic City, June 8-12, 1942. Requests for reservations should be sent immediately to Haddon Hall, Atlantic City, New Jersey.

DUVAL COUNTY AUXILIARY

The Woman's Auxiliary to the Duval County Medical Society held its March meeting in the home of Mrs. Edward Canipelli, on Lakewood Road, Colonial Manor.

In the absence of the president, Mrs. Raymond King, the first vice president, Mrs. J. D. Ferrara, presided. The local defense chairman reported that 16 blankets had been collected the previous week during the blanket drive. Mrs. C. E. Royce and Mrs. Gordon Ira were elected delegates to the State Auxiliary Convention to be held in Hollywood, April 13, 14 and 15.

Mrs. John F. Lovejoy introduced the guest speaker, Dr. Carita Doggett Corse, one of Florida's outstanding historians, who spoke on "Early Medical History in Florida." Dr. Corse pointed out that the first medical history in Florida was recorded by the French in the year 1564, and that the first public hospital was established in St. Augustine in 1598. She related many other

interesting facts about medical history in Florida under the French, English and Spanish rulers.

During the social hour refreshments were served from a lace covered table centered with a silver bowl of red tulips and candles in the patriotic colors of red, white and blue. Mrs. S. R. Norris and Mrs. Frederick J. Waas poured tea and coffee. Mrs. Canipelli was assisted in serving by Mrs. A. R. Ball, Mrs. Patterson and Mrs. Ferrara. About 35 members were present.

convention press

two eighteen west church street
jacksonville, florida

printers
publishers

Ambulance Directory

COMBS FUNERAL HOMES

Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

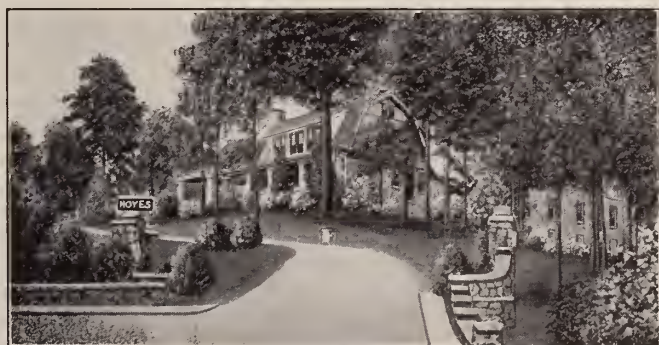
1201 South Olive

WEST PALM BEACH, FLA.

THE TUCKER SANATORIUM, Incorporated
212 West Franklin Street (Corner of Madison) RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.



HOYE'S SANITARIUM

"In the Mountains of Meridian"
Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and mild chronic mental cases also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoyer, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

Take a Tip from the Top Kick

"Take care of your rifle like it was part of your right arm. It's gotta be in top shape all the time or it won't be in there shootin' when you need it."

Men at war use many different weapons. Fighting men use guns. Production men use machines.

Your weapons are your professional knowledge and your instruments. You need them more today than ever before—just as your patients have greater need for you. American vision must be kept in top shape.

Take a tip from the top kick. Take extra good care of your instruments. Check them regularly. Some of them may be hard to replace for a while. If repairs are needed, get the best, directly from the manufacturer. Protect your professional services—so necessary today.



THE American  Optical COMPANY

FLORIDA MEDICAL DIRECTORY — 1942



Every member of the Florida Medical Association should have received his new Directory which was mailed in March.

Additional copies of the Directory may be purchased for \$1.00 each.

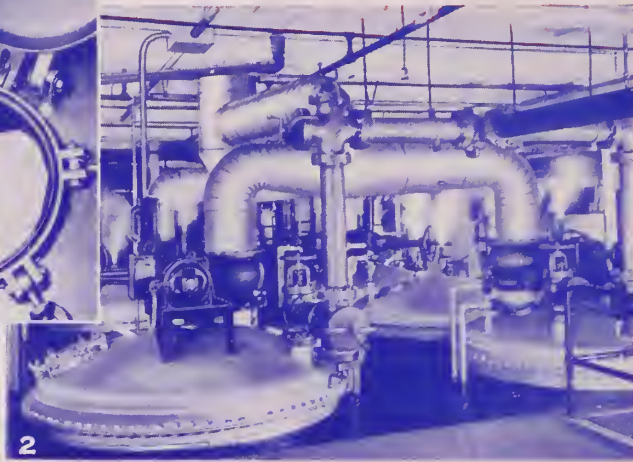
NOTICE



At the House of Delegates' meeting held in Hollywood, April 14, 1942, the By-Laws of the Association were amended to provide for four medical districts and eight councilor districts. This page, which is customarily used for listing component societies by districts, will show the new setup in subsequent issues of your Journal.



1



2

① One of many 3,000-gallon converters in which Dextri-Maltose is processed. Interior being thoroughly cleansed by hand prior to steam sterilization.

② Steaming under 20 pounds' pressure assures sterility of the huge converters for processing Dextri-Maltose.

③ Sanitary piping — short lengths and readily detachable — is used for conveying Dextri-Maltose. Sections of pipe being cleansed prior to sterilization by live steam pressure.

All DEXTRI-MALTOSE Equipment Is Sterilized by Live Steam Pressure

PHYSICIANS frequently express surprise that the cleansing and steaming of equipment for manufacture of Dextri-Maltose produces sterility comparable to that in hospitals. Huge autoclaves in the Mead Johnson factory steam-sterilize the smaller equipment, and live steam is forced under pressure into storage and processing tanks. This is but one of many precautions taken to make Dextri-Maltose a *carbohydrate safe for infants*. Unremitting care in laboratory and factory has resulted in a product which over a 4-year period has had an average bacterial count well under 100 per gram! Every step in the process of making Dextri-Maltose is under the eyes of competent bacteriologists.



3



4

④ Movable equipment used in the manufacture of Dextri-Maltose is sterilized in large hospital-type autoclaves at 20 pounds' steam pressure (259°F. for 20 minutes).

⑤ Steam at 20 pounds' pressure sterilizes Dextri-Maltose filter presses which remove protein and fat.



5

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U. S. A.

Please enclose professional card when requesting samples of Mead Johnson products to co-operate in preventing their reaching unauthorized persons

The JOURNAL of the Florida Medical Association, Inc.

Vol. XXVIII

MAY, 1942

OF MEDICINE

JUN - 1942

No. 11

CONTENTS

President's Address, Walter C. Jones, M.D., Miami.....	523
Proceedings of the Sixty-Ninth Annual Meeting of the Florida Medical Association, Inc.....	528
First General Session	528
Report, Secretary-Treasurer-Editor & Managing Director.....	528
Second General Session	532
Third General Session	532
Election of Officers.....	533
Scientific Assemblies, 1st, 2nd, 3rd and 4th	534
House of Delegates, First Meeting.....	534
House of Delegates, Second Meeting.....	537
Committee Reports:	
Scientific Work	538
Necrology	538
Medical Postgraduate Course	538
Cancer Control	539
Maternal Welfare	539
Child Health	540
Medical Education and Hospitals.....	540
Legislation and Public Policy	541
Public Relations	541
Venereal Disease Control	542
Tuberculosis and Public Health	542
Advisory to Woman's Auxiliary.....	543
Executive Committee	544
Medical Economics	545
Interrelationship	545
State Controlled Medical Institutions.....	546
Council	547
Medical Preparedness	548
Registration	548
Medical and Council Districts	551
Editorials: Gilbert S. Osipcup, Our President; Association's Annual Meeting	553
Medical Postgraduate Course	555
Schedule of Lectures.....	556
Faculty	557
Washington Conference on Procurement and Assignment	557
Births, Marriages and Deaths.....	557
State News Items	558
Component County Societies.....	558
Abstract Department	559
Bureau of Professional Relations	560
Advertisers' Notes	562
Woman's Auxiliary	564
Index to Advertisements	568
State and Sectional Meetings	569
Component Societies by Districts	570



"ALL OUT OF STEP BUT JIM!"

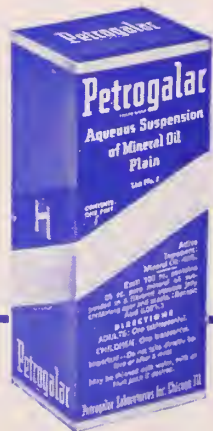
● Intelligent Army supervision soon corrects the errors of new recruits. But in civilian life errors in personal health habits usually must be corrected by the physician.

When constipation exists, the return to regular comfortable bowel movement may often be accomplished with the aid of Petrogalar.* It helps to soften hard, dry fecal masses, rendering the stool mobile and easy to eliminate.

Consider Petrogalar for the treatment of constipation. It is palatable, economical and effective.

FOR THE TREATMENT OF CONSTIPATION

Petrogalar—



*Reg. U. S. Pat. Off. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 65 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.

Petrogalar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



Why let a busy mother upset your formula balance?

THE OPTIMAL NUTRITION which your baby feeding prescriptions provide... may be lost through errors in formula preparation.

For even the best-intentioned mothers may make mistakes in measuring. Or leave out important supplements. Or fail to follow instructions completely.

Biolac makes such formula errors all but impossible, because:

1. Formulas are made by simply diluting Biolac with water.
2. Biolac provides completely for *all* the nutritional requirements of early infancy except for vitamin C.
3. No supplementary formula ingredients are necessary.

4. The adequate carbohydrate content of Biolac is processed in the milk, is in equilibrium and is sterile.

5. The nutritional completeness of Biolac is guaranteed by strict laboratory control of manufacturing operations and assays of product composition which are recognized in its A.M.A. Council acceptance.

Thus in prescribing Biolac you have these extra assurances that your babies will actually receive in their formulas the optimal nutrition you prescribe.

Biolac nutritional values equal or exceed recognized standards. For complete information, write Borden's Prescription Products Division, 350 Madison Ave., New York, N. Y.

Biolac is prepared from whole milk, skim milk, lactose, vitamin B₁, concentrate of vitamins A and D from cod liver oil, and ferric citrate. It is evaporated, homogenized, and sterilized.



Borden's BIOLAC

A BORDEN PRESCRIPTION PRODUCT



The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla.

Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924

Everhart Surgical Supply Co.

493 Peachtree St. N. E.
ATLANTA, GA.

We have been serving the Medical Profession in Florida and Georgia for over a quarter-century, successfully and satisfactorily.

G. I. BUTZER, *Florida representative*
45 E. WINTER PARK AVE., ORLANDO

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS

TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

Out-of-Town Orders Shipped by Return Mail

KEEPING WATCH IN AMERICA

American eyes on civilian defense—on defense production—on the target for tonight . . . all see more efficiently thanks to American professional and scientific skill, but with the progress of your professional technique, had you not encouraged us to strive constantly for improvements . . . Had we decided that no finer Tillyer lenses could be made than those we first produced—had we been reluctant to make improvements in instrumentation . . . Had you and we not sought unceasingly for "something better," America would not have the finest vision in the world today—a vital advantage in all phases of war effort.



BUY UNITED STATES GOVERNMENT DEFENSE BONDS

THE American  Optical COMPANY

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

These are the Reasons why we say "Try S-M-A"



- Physicians will find that S-M-A* is not a "compromise formula." It is a complete milk formula for infants deprived of human milk.
- Cows' milk fat is replaced with the unique S-M-A fat for easy digestion and adequate nutrition. It compares physically, chemically and biologically with the fat in human milk.
- The carbohydrates in S-M-A and human milk are identical.
- With the exception of vitamin C, the vitamins essential to normal growth and development (B₁, D, and A) are included in adequate proportion in S-M-A ready to feed.
- Furthermore, iron (so difficult to provide for the bottle-fed infant) is included in S-M-A. When prepared each quart provides 10 mg. iron and ammonium citrate.

* * * * *

Excellent results with hundreds of thousands of infants is reason enough why S-M-A is the choice of a steadily increasing number of physicians.

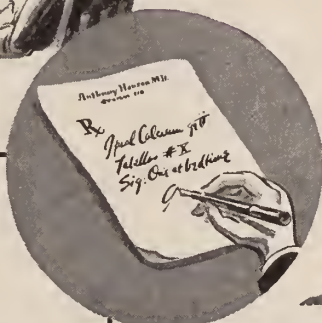
Try S-M-A. Results tell the true story more aptly than words and pictures.

*S-M-A, a trade mark of S.M.A. Corporation, for its brand of food especially prepared for infant feeding—derived from tuberculin-tested cow's milk, the fat of which is replaced by animal and vegetable fats, including biologically tested cod liver oil; with the addition of milk sugar and potassium



chloride; altogether forming an antirachitic food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrate and ash, in chemical constants of the fat and physical properties.

S.M.A. CORPORATION • 3100 McCORMICK BOULEVARD • CHICAGO, ILLINOIS



HOW SUPPLIED

IPRAL CALCIUM (calcium ethylisopropylbarbiturate) in 2-grain tablets and in powder form for use as a sedative and hypnotic. $\frac{3}{4}$ grain tablets for mild sedative effect throughout the day.

IPRAL SODIUM (sodium ethylisopropylbarbiturate) in 4-grain tablets for pre-anesthetic medication.

For literature address the Professional Service Department, E. R. Squibb & Sons, 745 Fifth Avenue, New York, N. Y.

E. R. SQUIBB & SONS

Manufacturing Chemists to the Medical Profession Since 1858

IPRAL induces sound restful sleep closely resembling the normal. By dulling the consciousness of physical and mental discomfort it helps the patient rebuild vital resources. Dosage is small . . . absorption and elimination rapid . . . and cumulative effects avoidable by proper dosage regulation.



6 to 8 HOURS RESTFUL SLEEP



Eye-witness Reports

DOCTORS who have tested PHILIP MORRIS on their *own* patients . . . and made their own observations . . . are the best friends PHILIP MORRIS has.

It is one thing to *read* results in a published research. Quite another to see with your own eyes how irritation of the nose and throat due to smoking diminishes on changing to PHILIP MORRIS.

May we suggest that you make your own tests?



PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.

119 FIFTH AVENUE, NEW YORK, N. Y.



Is absorbed
NOT TOO RAPIDLY
but **RAPIDLY ENOUGH**

Because the effectiveness of Bismuth Ethylcamphorate (injected intramuscularly) endures a longer time than does that of water solutions of bismuth salts, it makes possible a more convenient (weekly) visit interval for the patient. On the other hand, since it is more rapidly and completely absorbed than are oil suspensions of insoluble bismuth compounds, less material in terms of metallic bismuth is needed to maintain a therapeutic level, and danger of toxicity is minimized.

Sterile Solution Bismuth Ethylcamphorate is the bismuth salt of ethyl camphoric acid dissolved in sweet almond oil. It is available in boxes of six and twenty-five 1 cc. ampoules, and in 30 cc. vials.



Fine Pharmaceuticals Since 1886

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS



All-out efforts for a successful conclusion of hostilities demand the hands, brains and hearts of every American. Maintenance of maximum efficiency requires a healthy, well-nourished body. Our men in the armed forces are assured of nutritionally balanced meals, but, the folks at home also need proper nourishment so that they can do

their jobs . . . so important to the men in the field.

COCOMALT, daily, is an excellent "defense" addition to meals. More and more, physicians are recommending this delicious drink for the entire family. This enriched food drink contains vitamins A, B₁ and D as well as the minerals, calcium, phosphorus and iron.



A New Clinical Study has again shown the value of COCOMALT in therapeutic diets. Have you sent for your copy of "The Use of a Malted Food Preparation as a Dietary Supplement in Pulmonary Tuberculosis"?

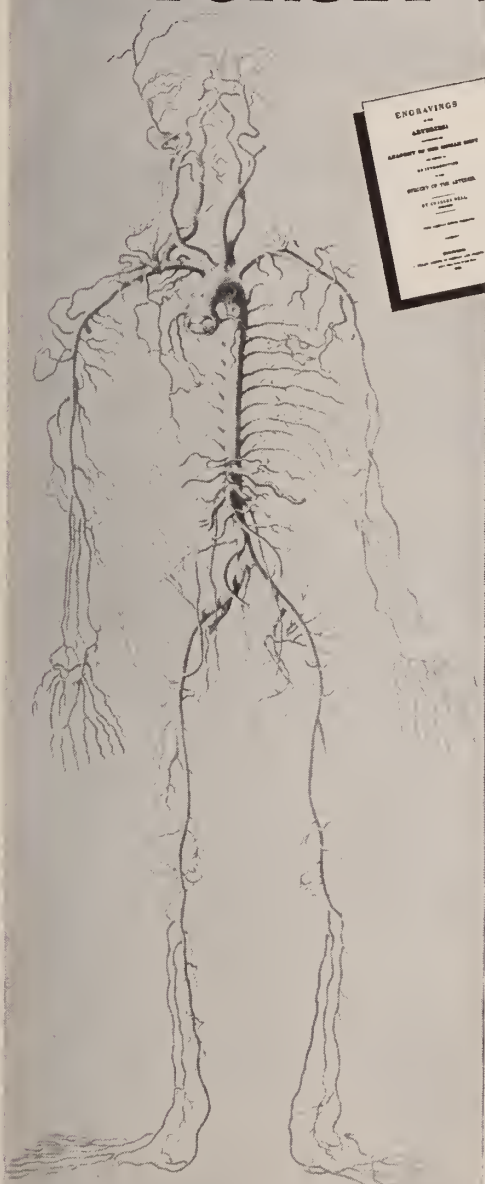
Cocomalt *Enriched Food Drink*

R. B. DAVIS COMPANY • Hoboken, N. J.

vasoconstrictor
circulatory stimulant

hemostatic
resuscitant

THE HORMONE THAT DOCTORS FORGET IS A HORMONE



Reproduced from the 1833 edition of "Anatomy of the Human Body" as drawn by the master artist-anatomist and surgeon, Sir Charles Bell. He depicts the "Scheme of the Arterial System."

Although Adrenalin* was the first hormone to be isolated in pure form, it is seldom used to relieve hormone deficiency. Its many common and important uses based on its characteristic actions—as a vasoconstrictor, circulatory stimulant, and hemostatic—have tended to obscure its endocrine origin.

Injected hypodermically, Adrenalin is one of the best and probably the most widely used of agents for rapid relief from asthmatic paroxysms. Applied locally, it is of value in hemorrhage of accessible mucous membrane areas . . . Adrenalin (Epinephrine U.S.P.) finds favor in the prevention and treatment of allergic reactions due to injection of biologicals or arsenicals.

Adrenalin is the pure, natural, 100% active hormone of the adrenal medulla. Adrenalin is produced solely by Parke, Davis & Company.

When a crisis occurs, use Adrenalin.

*TRADE MARK REG. U. S. PAT. OFF.

ADRENALIN CHLORIDE SOLUTION 1:1000

*A product of modern research offered to the
medical profession by*

PARKE, DAVIS & COMPANY
DETROIT MICHIGAN



Over 75 Years of Service

to Medicine and Pharmacy

THE REAL IMPORTANCE IN CIGARETTE



Less nicotine in the smoke of SLOWER-BURNING CAMELS

than in that of the 4 other largest-selling brands tested—less than any of them—according to independent scientific tests *of the smoke itself!*

*—when you are advising
patients on the brand
of cigarette to smoke*

MAJOR scientific opinion agrees on 3 facts about cigarette smoking—

1. Nicotine is the chief component of pharmacologic and physiologic significance in cigarette smoke.
2. Nicotine is important to the smoker *only in the smoke.*
3. Available medical research* indicates, and Camel's scientific tests on hundreds of samples show (see pictures), that a slower-burning cigarette produces less nicotine in the smoke.

Then here is the important question:

CAMEL

THE CIGARETTE OF COSTLIER TOBACCOS

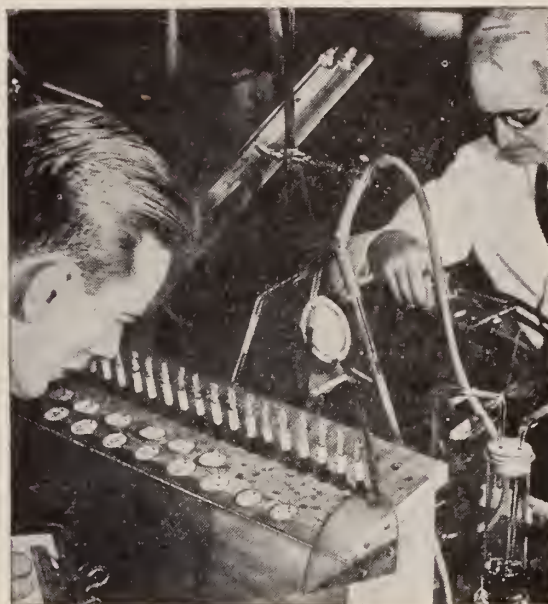
OF LESS NICOTINE SMOKE

Is a reduction of nicotine *in the smoke itself* of real physiologic importance to a regular Camel smoker?

A prominent physician states in an important article** on smoking, that when injections of nicotine were increased by only 25%, profound changes in blood pressure occurred.

The "Pleasure Factor"

In addition to a desirable reduction in nicotine intake, Camel offers another big advantage—a bid for patients' cooperation in a program of smoking modification. Camel is the slower-burning cigarette for more mildness, coolness, flavor!



In the same tests, Camel burned SLOWER than any of the 4 other largest-selling brands tested.

* J. A. M. A., 93:1110 — October 12, 1929

Brückner, H—Die Biochemie des Tabaks, 1936

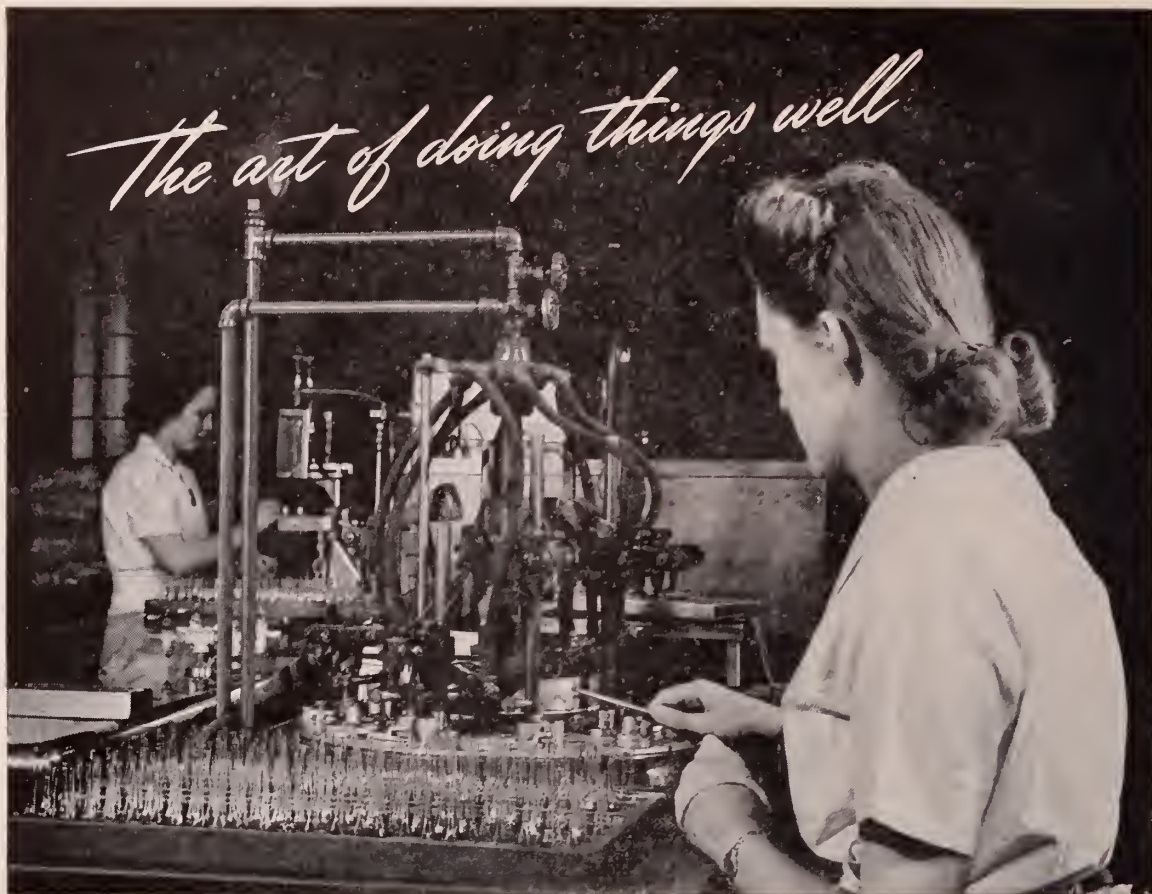
** The Military Surgeon, Vol. 89, No. 1, p. 7,
July, 1941

SEND FOR REPRINT of an important contribution to medical literature—"The Cigarette, The Soldier, and The Physician," *The Military Surgeon*, July, 1941. This significant analysis reveals many new angles about smoking that should be valuable to you when modifying patients' smoking without disturbing their smoking enjoyment. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

Name _____

Street _____

City _____ State _____



IT MAY TAKE years of experience to find the best way to do a thing. Take the problem of sealing ampoules, for instance. That's a job that can be done very well by hand, but it's slow work when every ampoule must be handled individually. The machine way is best. Production steps up when steel fingers are set to molding the smooth tips of heat-softened glass. Quality is better, too, for ampoules sealed mechanically rarely have charred tips and black floaters to plague the inspectors. Lilly Ampoules provide fine medication in finest glass enclosures.



Eli Lilly and Company

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U.S.A.

PRESIDENT'S ADDRESS

WALTER C. JONES, M. D.

MIAMI

During the past two years it has been my honor and privilege to serve the members of the Florida Medical Association in official capacities. Many times I have traversed this grand old state and in the majority of instances at financial loss. The compensation has been the opportunity of knowing better and associating with men who are striving along kindred lines for the unselfish betterment of humanity. After all the friendships we form along the road are what count most in this life. As Emerson said, "For, when men shall meet as they ought, each a benefactor, a shower of stars clothed with thoughts, with deeds, with accomplishments, it should be the festival of nature which all things announce."

The work of the past year has put me in touch at various times with members of state committees. I am grateful to each member and particularly to the chairmen for their efforts in behalf of organized medicine. It is essential at this time that each member become more interested and work more diligently if the American way of practicing medicine is to continue. In the past few years there has been a definite tendency on the part of the layman and particularly certain lay organizations to lower the physician from the pedestal upon which his predecessors stood. Only through individual honesty with himself is the physician in position to deal with his patients as he would have them deal with him. I believe that this is the basis upon which organized medicine should build and that too frequently the actual basis has been the cause of just criticism. "To thine own self be true, And it must follow as the night the day, Thou canst not then be false to any man."

The duties of the presidential office are multiple and have brought me affiliation with various Public Health, civic, educational, and political organizations. These associations have been pleasant in the majority of instances. Some I would have declined except that as representative

of organized medicine in this state I felt it my duty to attend. These various bodies have complimented our organization by giving us membership upon their executive committees. It is necessary that the medical profession become more interested in and assist in guiding these lay groups along medical lines.

The details of our Association could not be handled by any president. We are fortunate in having as Director a man with a keen sense of business, who is a stickler for detail and possesses a basic knowledge of medical training and ethics. The greater part of the work of the President of the Florida Medical Association is done by our able Managing Director, Dr. Stewart Thompson.

In spite of the strenuous times, which create intense emotional strain, the Association has had only two small rifts. Both of these were handled by local societies through advice from the Council. Also, under the able direction of the Chairman of the Council and the District Councilors, six interesting, instructive, and harmonious meetings were held. These district meetings are of definite benefit to the local membership. They permit outlet for additional scientific papers, give the state officers an opportunity to meet and discuss with the membership problems of the Association and afford a pleasant social hour in which busy neighbors may relax and learn to know each other when the shell is removed.

My first official duty was the appointment of new members to standing committees. I found great inequality of representation on committees because of the great difference in medical population. One district, for example, has 88 members while another has over 400. It happens frequently also that with a large committee the sense of responsibility is not always personal. An incoming president has no chance to use initiative, but is bound by this setup to formulate his committees regardless of whether there is an available man who has shown interest in organized medicine, whereas he may know several capable men who can not be used on any committee.

Since the district meetings have been of much value, it is believed that they should be retained, but that they could perhaps be reduced in number without failing to serve all sections satisfactorily. The function of the Council has been found necessary and should be continued, but the chairman should be free to supervise the activities of each councilor district without having the responsibility of an individual district.

After discussion with members of the Executive Committee and much study, Dr. Thompson mapped out four Medical Districts, each with two Councilor Districts. The membership in these vary from 145 to 443, but the larger districts contain the larger cities. Since all committees have been formed from membership of the respective medical districts, it was decided that from each district a member should be appointed for four years in staggering manner so that each year the President would appoint one member from the vacated district's position to each committee. Too, he would appoint one member for one year to each committee from the state at large, thus giving him some opportunity to use men whom he knows to be particularly interested in some phase of organized medicine. The chairman of the Council also would be appointed for one year from the state at large. A councilor would be appointed for two years from four of the Councilor districts.

A member who is exalted to the position of the presidency of our Association has spent many years in preliminary training on the various standing committees. Also, he serves two years in active participation in the functions of the Association. Upon completion of his term of service he has too often been placed on the shelf and made to cease all activities. At this time he is probably more cognizant of the workings of the Association than any other member. It is now proposed that the President, upon completion of his term of office, shall serve two years on the Executive Committee, the body which handles the business of the Association when the House of Delegates is not in session.

These suggestions have been discussed before the district meetings with favorable comment. The necessary changes in by-laws have been studied by the Executive Committee and will be presented to the House of Delegates at this session for their deliberation and, it is hoped, their approval.

Several times it was my pleasure to meet with the officers and members of the Woman's Aux-

iliary. The members of the Association do not appreciate sufficiently the work these women are doing. They are a powerful influence in the maintenance of a correct medical perspective by the public. They should be assisted by our members in their efforts and not hindered, as I fear may often be the case.

The principal charge which I gave the Woman's Auxiliary this year was that it begin the accumulation of the past and current medical history of Florida. In each community many members are living who know interesting data relative to medical pioneers of the state. Also, living relatives may have photographs, newspaper clippings, or other comments about early practitioners. It is my desire that such information about outstanding men of Florida medicine, present and past, shall be accumulated and filed by the Secretary in the archives of the Association. What is well known today will be forgotten tomorrow unless it is written and conserved. Someone someday will desire to write a history of Florida medicine. Let's assist our Auxiliary not only in this detail, but in other work which it is doing.

It has been my privilege on several occasions to confer with our charming and lovable Governor, Spessard L. Holland. The State of Florida is being ably guided by our chief executive, a man of untiring energy, who honestly is striving to steer us through these perilous times. In all matters concerning health he has conferred with and been advised by our Executive Committee. He has seen fit to place, wisely we think, two physicians on the State Board of Health. He is intensely interested in seeing that Florida receives a higher and just appropriation for health from the federal government.

In this connection I should like to pay tribute to our State Board of Health. It has a most complete staff and the best qualified persons for their respective positions that it has been my privilege to know. In all medical matters its members have conferred with our Executive Committee relative to policies. A most happy and cooperative relationship now exists between the Florida Medical Association and the State Board of Health. As long as it continues along lines of preventive therapy, I am sure the physicians will likewise continue cooperation.

At the present time a committee suggested by the Governor and composed of two members of the Florida Medical Association, a member of the State Board of Health, two members from the

State-Wide Public Health Committee, and Mr. Velma Keen, an able attorney of Tallahassee, is making a comprehensive study of the health laws of Florida. It is also examining the health laws of other states in order that a long time program for the improvement of health in Florida may be started. Its members fully realize that this cannot be accomplished immediately, but they believe that a basis must be established upon which to consider legislation for amalgamation of health laws, that this program will have to be started judiciously and that it will require possible constitutional amendments and much legislative perspicuity and manipulation.

With the present large military encampments, together with the high incidence of venereal disease in Florida, your Committee on Venereal Disease has been diligent. It has mailed to every physician in the state, Venereal Disease Control information as published by the United States Public Health Service. A colored film on the diagnosis and treatment of syphilis has been offered to the secretary of each county society. All societies that have not used the opportunity to show this motion picture should do so. In cooperation with the Medical Postgraduate Committee, the committee expects to have a course on Venereal Disease presented this June. In an attempt to get better attendance at this course, through the State Board of Health, it agrees to pay twenty-five dollars to one member from each county society. The only obligation is that the member shall attend the course and upon his return report to his society the information he has obtained.

Your Committee on the Medical Postgraduate Course has accomplished and approved the affiliation of the Graduate Short Course with the University of Florida. This has also been approved by the State Board of Control. The tenth annual Graduate Short Course will be given June 22-27 in Jacksonville by the Graduate School of the University of Florida in cooperation with the Florida Medical Association and the Florida State Board of Health. This is a great step forward in medical education for Florida. It will eventually mean the enlargement of the present program backed by the University. Also, it will permit graduate work to be taken under its facilities to other sections of the State. Through cooperation with the Florida Agricultural and Mechanical College it will give negro physicians opportunity to avail themselves of these courses. I feel very strongly that the membership of the Florida Medical Association

has not fully realized the wonderful opportunities for education offered in the past nine years by these Graduate Courses. The lecturers are always outstanding in their profession and present their subjects so that they will be of value to the practitioner doing general work. The highly specialized physician will, however, find that this course offers the easiest way to keep informed on all other fields of medicine. Let me insist that each of you avail yourself of these opportunities.

Since last we met we have become embroiled in the most extensive struggle the world has ever known. Each year we have met with joy and gladness, enthusiastic in the achievements of our profession. This year a spirit of sadness but determination prevails. Our responsibility and problems have been immensely increased. Millions of our dearest, our most beloved, are now consecrating their lives to the overwhelming but conquerable task of making the world free. They will be mutilated, many of them killed, and they will be exposed to diseases which it will be our duty to prevent, moderate, remedy and repair.

The world is bathed in blood and tears. Its peace has been devastated. This war is a struggle between the ideals of democracy and autocracy of the most despicable type, Nazism. These two principles cannot dwell together on this earth. Our enemies believe that might makes right; we believe that right makes might. As Van Dyke said, "The Barabbas of war was preferred to the Christ of righteous judgment." We who loved peace are forced to fight for it or give it up forever.

We must play our appointed part in the world, consecrate ourselves to our principles and policies, put aside selfishness, distraction and the very peace which we desire in order that peace may be given to the world. Our aims and lofty ideals have been summarized and told to the world by that great student of history, that worldwide philosopher and tireless American statesman, Franklin D. Roosevelt, Prime Minister of the World.

It is not the Teuton nor the Oriental who is the enemy of civilization. It is the god of greed backed by the spirit of militarism that is the enemy. From the shores of Iceland, through the Holy Land itself, across into the Eastern world and dipping deeply into the South Seas, this grim-faced monster, War, has raised its bloody head. It is into this "hell of iron" that the youth and flower of American manhood are flinging them-

selves. They have joined in the comradeship of arms with their fearless British cousins and other allied nations desirous of right predominating.

Of a poilu Henry Barbusse wrote:

Each one knows that he is going to take his head, his chest, his belly, his whole body, and all naked, up to the rifles pointed forward, to the shells, to the bombs piled and ready, and above all to the methodical and almost infallible machine guns, to all that is waiting for him yonder and is now so frightfully silent, before he reaches the other soldiers he must kill. They are not careless of their lives, like brigands, nor blinded by passion like savages. It is in full consciousness, as in full health and full strength, that they are massed there to hurl themselves once more into that sort of madman's part imposed on all men by the madness of the human race.

It was a manly young fellow such as this who when brought to the dressing station by the stretcher bearers said: "I offered England my life and she took only my arms."

Are the physicians and surgeons of America too skillful and too busy with personal matters to minister to men with such fortitude? No! the sons of Esculapius have never failed. As Sir Moynihan has said: "We are, as a profession, by intellectual descent and by solemn adoption, the heirs of the men who have made our race great and famous." We rejoice that Florida physicians serving in the armed forces are now over 100 strong, and others are anxiously awaiting word in response to their application for service as volunteers.

On Oct. 30, 1941, upon request from the House of Delegates of the American Medical Association, the Procurement and Assignment Service for Physicians, Dentists and Veterinarians, an agency of the Office of Defense, Health and Welfare Services, was authorized by the President. The Directing Board with its executive officer are known to all. The central office is located at 601 Pennsylvania Ave. N. W., Washington, D. C. A consultant office has been established in the headquarters of the American Medical Association in Chicago, where special information regarding physicians may be obtained.

In each of the nine Army corps areas a committee has been established, composed of a chairman, two physicians, a dentist, a representative of medical education, a representative of dental education, a veterinarian, and a hospital representative. These committees are advisory to the Directing Board on matters relating to personnel and are a part of the field organization of the Office of Defense, Health and Welfare Services. The chairman of each of these committees acts in a liaison capacity to the corps area surgeons and

representatives of the Office of Civilian Defense, and to the Selective Service System. The state chairman and state committees are advisory to the corps area committees and to the central office. In particular, through cooperation with the county committees they will advise concerning the essential character of services a physician, dentist, or veterinarian may be rendering locally and thus concerning his availability.

In a short while an enrolment blank should be received by every physician, dentist and veterinarian. This should be filled out and returned to the Central Office of the Procurement and Assignment Service immediately. By so doing you will have volunteered your services. It is hoped this may be the case, that the medical profession will freely give its services as needed. Should this enrolment blank not be returned, I know of no definite action, but I do know that there exists a very close relationship between the Procurement and Assignment Service and the Selective Service boards. I have been told that no physician who may have to be drafted will serve other than in medical service, but that it will take at least two months for him to obtain a commission.

If you are under 36 years of age, unless you are essential to your community or physically disqualified, and if you have some particular phase of the service in which you would like to serve, you would be wise to make that decision and immediately start action toward obtaining a commission in such a branch. There is no problem so far as you are concerned. You are needed now and you are needed urgently. The Medical Corps of the United States Army is about twelve thousand short of the number needed for this year.

On the basis of an army of 3,500,000 men, according to the present medical ratio there will probably be required at least 25,000 physicians in the medical division of the military service. Of this number about 80 per cent will be under 36 years of age. The Army Air Corps alone wants 6,100 physicians during the remainder of this year, 2,500 to be commissioned by July 1 and 500 each month thereafter.

Approximately 20 per cent of the needed physicians will be commissioned from among those between 36 and 45 years of age. If you are under 55 years for the Army and under 50 years for the Navy, you may apply to the Procurement and Assignment Service for commission. Any physician may apply either directly to the military

services or to the Procurement and Assignment Service for commission after expressing willingness to serve.

Should your state committee through information from your county committee advise the Procurement and Assignment Service that you are unavailable, you will be notified with a letter of thanks for your voluntary action and a statement that you are considered essential to your community. Also, you will be given a certificate to that effect and will be granted the privilege of purchasing a pin designating the fact that you volunteered your services, but because of local duties you were advised to remain at home. If you insist on military service, you may appeal to your Corps Area committee. The decision of this committee will be final.

The Procurement and Assignment Service will try to protect the civilian population by preventing enlistment of men in the military services who are essential to the welfare of their respective communities. On the other hand, the medical personnel requested by the Army, Navy and Public Health Services must be procured and assigned. These orders must be filled. We are losing a war. This is a total war. Each must do his duty whether at home or abroad. I believe the medical profession of America is going to do

this voluntarily. The alternative is a Nazi straight jacket in the future. Never yet has the medical profession had to be drafted into service. Its members have always given freely. They will continue to give freely in order that principles of right may dominate might. We who love peace must fight that peace may be given to the world. "Rome endured as long as there were Romans. America will endure as long as we remain Americans in spirit and thought."

That great anatomist, physiologist and author, Oliver Wendell Holmes, has beautifully said of our profession:

As life's unending column pours
Two marshalled hosts are seen,
Two armies on the trampled shores
And death flows black between.

One marches to the drum-beat roll,
The wide-mouthed clarion's bray
And bears upon its crimson scroll
Our glory is to slay.

The other marches in silence by the stream,
With sad, yet watchful eyes,
Calm as the patient planets' gleam,
That walks the clouded skies.

Along its front no sabers shine,
No blood-red pennons wave,
Its banner bears the single line
Our glory is to save.

802 Huntington Bldg.

The Tenth Annual Medical Short Course

WILL BE HELD AT THE

George Washington Hotel, Jacksonville

JUNE 22 THROUGH JUNE 27, 1942

MEDICINE - - - - SURGERY

OBSTETRICS - - - - GYNECOLOGY

PEDIATRICS - - - - VENEREAL DISEASES

For more complete information, see pages 555, 556 and 557

PROCEEDINGS

of the

Sixty-Ninth Annual Meeting

of the

FLORIDA MEDICAL ASSOCIATION, Inc.

Held at HOLLYWOOD
APRIL 13, 14, 15, 1942

GENERAL SESSIONS

FIRST GENERAL SESSION

The Sixty-Ninth Annual Meeting of the Florida Medical Association was called to order at 1:30 p. m., Monday, April 13, in the Assembly Room of the Hollywood Beach Hotel, Hollywood, by President Walter C. Jones.

Invocation by the Reverend George Robert Allen.

Dr. James R. Sory, President, Palm Beach County Medical Society, gave the address of welcome.

After relinquishing the chair, Dr. Walter C. Jones delivered the presidential address. (See page 523).

The following report of the secretary-treasurer and editor of the Journal, Dr. Shaler Richardson, and managing director, Dr. Stewart Thompson, was read by Dr. Richardson:

REPORT OF SECRETARY-TREASURER, EDITOR OF THE JOURNAL, DR. SHALER RICHARDSON, AND MANAGING DIRECTOR, DR. STEWART THOMPSON

Mr. Chairman, Members of the Association, and Guests:

It is my privilege to present the seventeenth annual report that Dr. Thompson and I have prepared. The unusual conditions prevailing at present have affected the affairs of the Association. It has been a struggle to keep up the heavy routine in your Association's office, with the addition of extra work caused by shortages and increased cost of materials, the medical preparedness program, and other factors that are the outgrowth of a country at war.

CHANGE OF CONVENTION CITY EXPLAINED

The Executive Committee, through unanimous vote by wire, changed the meeting place of the Sixty-Ninth Annual Convention of the Association from Palm Beach to Hollywood. This action followed the receipt of a telegram on March 17, 1942, from Mr. I. N. Parrish of New York City, sales manager of the Southern Florida Hotels, which reads in part:

Have just received from George McDonald, owner of hotels, following cable quote account national defense program, cannot hold Florida Medical at Palm Beach Biltmore.

Hotel facilities had been surveyed carefully at the time Palm Beach was selected as our convention city, and the Palm Beach Biltmore appeared to be the only suitable hotel. After receiving Mr. McDonald's cable message, a hurried checkup was made of available facilities in Palm

Beach, but none were found, which would adequately serve our needs. The following telegram was received from Dr. J. R. Sory, president of the Palm Beach County Medical Society:

Palm Beach Biltmore refused to stay open to accommodate Fla. State Medical Convention. Breakers Hotel will not consider, leaving Palm Beach County Society without adequate hotel facilities to entertain same. Will agree to transfer same to Hollywood Beach Hotel.

Mr. Oscar Johnson, manager, agreed to have the convention at the Hollywood Beach Hotel, and assisted in making hurried arrangements for meeting rooms, exhibit hall, entertainment, etc. The officers and members of the Palm Beach County Medical Society are our official hosts, assisted by the members of the Broward County Medical Society.

MEMBERSHIP

The total membership at the end of 1941 was 1,403, as compared with 1,405 for the previous year. This we feel is a splendid showing, inasmuch as 43 members had been dropped in December for non-payment of dues. A certification was requested from the secretary of each component society for the number of members in military service, as required by an action of last year's House of Delegates. The returns to date indicate that 116 of our members are now on active duty.

Our first annual report, which was for the calendar

NUMBER OF MEMBERS BY YEARS, 1925-1941

YEAR	TOTAL	0	500	700	900	1100	1300	1500
1941	1403							
1940	1405							
1939	1353							
1938	1293							
1937	1244							
1936	1126							
1935	1065							
1934	995							
1933	893							
1932	927							
1931	934							
1930	964							
1929	1020							
1928	1068							
1927	1106							
1926	1018							
1925	645							

year 1925, showed 645 members. The following year the membership totaled 1,018. After 1927 the total gradually decreased until there was in 1933 a membership of 893, which decline was undoubtedly caused by the depression. From that date on, an increase was shown each year until, for the past two years, the membership has been over 1,400.

The accompanying chart indicates the number of members by years from 1925 to 1941 inclusive, and portrays the membership growth. This increase has been made possible by the added interest of our members and by strenuous efforts to include in our membership all ethical doctors who can qualify under the Association's requirements.

MEDICOLEGAL ACTIVITIES

The need for investigating and bringing to justice persons practicing medicine in Florida in violation of the medical practice act has been a difficult problem in the past. It is not the duty of a state medical association to police the state nor to pay court costs. Practicing physicians are often acquainted with the facts pertaining to these violations, but are not in a position to do much about it.

Through the State Board of Health, the State Board of Medical Examiners and the Executive Committee of your Association, a plan was worked out whereby Mr. M. H. Doss, Director of the Bureau of Narcotics of the State Board of Health, and his three assistant inspectors took over these activities. Mr. Doss and his inspectors did some very constructive work during the past year. In his annual report, dated January 21, 1942, he records that 24 criminal cases in which there was violation of the medical practice act resulted in arrests, and an aggregate of 13 years and 3 months in sentences was imposed by the courts. Fines imposed by the courts totaled \$2,325.00. Violations corrected where no legal action was taken totaled 43.

In order that Mr. Doss might have the necessary prestige in court, the annual registration of those practicing the healing art was transferred from the Bureau of Vital Statistics to the Bureau of Narcotics. This change makes Mr. Doss custodian of the records and therefore places him in a position to testify in court.

If there is an impostor or someone practicing medicine without a license in your district, contact Mr. M. H. Doss of the State Board of Health, Jacksonville, in order that he may start an immediate investigation.

FINANCES

The total income from all sources during the past fiscal year was \$21,262.36. Expenditures during the past fiscal year amounted to \$20,769.03, which leaves a small balance of \$493.33. The fiscal year just ended, however, is for eleven months, while the previous year was for twelve. With our continual enlarging of Association activities, in recent years there has been little opportunity of saving money for emergencies. The revenue has, through earnest effort, been increased, but is always offset by new committee activities or some other expansion of organized medicine.

During the past seventeen years all old debts were paid, a progressive program financed, and a substantial surplus set up. Each member derives the benefits from a strong, active association; he receives his Journal each month and a Medical Directory each year for a maximum assessment of ten dollars in any one year, or less than twenty cents per week.

The books and records of the Association are open to our members and we will be glad to answer inquiries, as far as possible, of any nature. The books have been audited by Ford and Colley, and a certification thereof is incorporated in the statements at the end of this report.

1942 MEDICAL DIRECTORY

Beginning with 1938 a Medical Directory has been published each year and mailed to our members free of charge.

This publication is of definite service, not only to our members, but also to those in allied fields.

It is not necessary to explain in detail the contents of the Medical Directory, as you have all had many occasions to refer to it for information concerning practitioners of medicine, medical boards, hospitals, and laws affecting the medical profession.

Three thousand copies of the Medical Directory were printed this year, at a cost of \$419.95, and the income from advertising and sale totaled \$927.50. While the Directory is now recognized as a necessity by our members, it is a satisfaction to know that the income from it is more than double the printing cost.

THE JOURNAL

Everything possible is being done to make your Journal interesting and worthwhile. The scientific section is just as valuable as the talents of our essayists will permit. The Journal belongs to our members and papers sent in by them must receive the careful consideration of the Publication Committee. Some papers are excellent, but others are poorly written or contain nothing except what has been taken from the literature. Your Publication Committee is, therefore, often placed in the difficult situation of having to decide whether to accept or reject a paper that is on the borderline. During the past year all papers had what we term a preliminary editing by Mrs. Edith B. Hill, who is experienced in medical writing. It is our hope that the readers have observed an improvement from this service in the medical section of the Journal.

Beginning with the January number, white cover stock with blue ink was substituted for the old blue and black cover. The white cover paper is slightly less expensive than the blue and we hope this modernization of your Journal has met with approval.

One of the main reasons for making the change in January was to secure advertisements in more than one color. A charge is made for each color used, so the change has meant a small increase in the revenue for our advertising department.

The price of paper stock has increased several times during the last year and a half, but by purchasing a year's supply in advance, we have been able to keep the cost within reason. It is not possible to anticipate the paper situation six or eight months from now, when additional paper will be needed.

As we have mentioned many times, this is your Journal and we are trying to publish it in accordance with the wishes of the members. Constructive criticisms are solicited.

Respectfully submitted,

Shaler Richardson,
Stewart G. Thompson.

FORD & COLLEY

Certified Public Accountants

Jacksonville, Florida
April 6, 1942.

Dr. Shaler A. Richardson, Treasurer
Florida Medical Association, Incorporated
Jacksonville, Florida

Dear Sir:

We have examined the attached statements of Receipts and Disbursements of Florida Medical Association, Incorporated, Exhibits "A" to "E," both inclusive, and the Consolidated Cash Statement, for the period begun April 15, 1941 and ended May 25, 1942. These statements have been prepared by Dr. S. G. Thompson, Managing Director of the Association and the Florida Medical Journal, and Mrs. Naomi Hilton, bookkeeper, and correctly reflect the cash transactions for the period stated as shown by the books of account.

We have checked the additions of the cash record and have compared the disbursements as entered therein with the cancelled checks returned by the bank. We have checked the recorded collections to the bank deposits as shown by the bank's statements and have obtained the

written confirmation of the bank as to the balance at the close of the period. We have obtained the written confirmations of the banks as to the savings accounts. We have checked the general ledger postings and have verified the general ledger additions.

As we do not have access to the records of the various County Societies for the purpose of checking the remittances of dues, attention is directed to Exhibit "D" herewith which gives details regarding this matter.

Income from Journal advertising was verified substantially by comparison with a detailed statement of contracts with advertisers furnished by the Association's office.

We have verified the \$10,000.00 2% United States Treasury Bond with the Atlantic National Bank of Jacksonville, its custodian.

Yours very truly,

FORD & COLLEY

(Signed) By George H. Ford.

CONSOLIDATED CASH STATEMENT

April 15, 1941 through March 25, 1942

<i>Receipts</i>	
Cash in Bank, April 15, 1941	\$25,481.51
Dues and Entrance Fees Collected (Exhibit "D")	\$12,810.00
Earnings from Advertising (Exhibit "E")	5,285.61
Subscription and Misc. Sale of Journal & Directory	102.35
Profit from Reprints (nonmembers)	6.18
Interest on Savings and Investment	401.72
Medicolegal Aid—Deposit by Dade Co. Med. Society	200.00
Earnings—Technical Exhibits (Exhibit "C")	2,456.50
	21,262.36
Total Cash to be Accounted for	\$46,743.87

<i>Disbursements</i>	
General Fund Expenses (Exhibit "A")	\$ 8,338.89
Journal and Directory Expenses (Exhibit "B")	7,780.41
Technical Exhibit Expenses (Exhibit "C")	\$851.55
To Entertaining Society	982.60
Committee Expenses (Exhibit "A")	2,709.50
Furniture, Fixtures & Equipment	3.89
Library	33.62
Federal Tax	28.57
Medicolegal Aid	40.00
	20,769.03

Balance in Bank, Mar. 25, 1942 \$25,974.84

EXHIBIT "A"

CASH STATEMENT—GENERAL FUND

April 15, 1941 through March 25, 1942

<i>Receipts</i>	
Cash as per last audit	\$25,481.51
Back Dues Collected (Exhibit "D")	\$3,040.00
Current Dues Collected (Exhibit "D")	9,110.00
Entrance Fees Collected (Exhibit "D")	660.00
	12,810.00
Interest on Savings and Investment	401.72
Medicolegal Aid—Deposit by Dade Co. Med. Society	200.00
From Exhibit Fund	622.35
Total Cash to be Accounted for	\$39,515.58

<i>Disbursements</i>	
Postage and Supplies	\$447.37
Telephone and Telegraph	142.32
Salaries	6,355.00
Traveling Expense	329.51
Delegates' (2) Transp. to Cleveland	145.00
Legal Counsel	91.66
Office Rent	660.00
Towel Service	13.75
Auditing Books	12.50
Messenger Service	6.80
Bank Exchange	2.73
Photostats and Legal Copies	12.80
Clipping Service	55.00
Subscription—Times-Union	13.20
Employers' Liability Insurance	14.00
Repair & Service on Equipment	33.75
Incidental	3.50
	8,338.89
Committees:	
Council	292.19
Legislative	1,794.09
Executive	44.16
Medical Preparedness	18.15
Scientific Work	44.91
Postgraduate Course	500.40
Miscellaneous Committee Expense	15.60
	2,709.50
Furniture, Fixtures & Equipment	3.89
Library	33.62
Federal Tax	28.57
Medicolegal Aid	40.00
To Journal & Directory Fund (Cost above Income)	2,386.27
	13,540.74
Cash Balance	25,974.84

EXHIBIT "B"

CASH STATEMENT—JOURNAL AND DIRECTORY FUND

April 15, 1941 through March 25, 1942

<i>Receipts</i>	
Cash as per last audit	\$ 0.00
Earnings from Advertising (Exhibit "E")	\$5,285.61
Subscriptions and Misc. Sale	102.35
Profit, Reprints to Nonmembers	6.18
From General Fund	2,386.27
	7,780.41
To Be Accounted for	\$7,780.41

<i>Disbursements</i>	
Postage and Supplies	\$ 369.48
Printing and Stock	4,474.38
Telephone and Telegraph	82.65
Salaries	2,714.89
Dray	17.50
Auditing Books	12.50
Messenger Service	8.10
Express and Freight	2.83
Cuts and Repair of Cuts	65.43
Addressograph Service and Repair	17.05
Copyright 1941 & 1942 Directories	4.00
Incidental Expense	11.60
	7,780.41
Cash Balance	\$ 0.00

EXHIBIT "C"

CASH STATEMENT—EXHIBIT FUND

April 15, 1941 through March 25, 1942

Receipts

Cash as per last audit.....	\$ 0.00
Earnings from Technical Exhibits	2,456.50
To Be Accounted for	\$2,456.50

Disbursements

Convention Expense:	
Postage and Supplies...	\$30.06
Telephone & Telegraph	80.50
Floor Plan and Electrotrope	30.50
Exhibit Booth Equipment	332.50
Printing & Photostats	13.60

Programs	93.50	
Badges	68.26	
Employees' Transportation	42.65	
News Service, Cuts & Mats	47.90	
Proceedings Reporter	66.75	
Past Presidents' Buttons	25.50	
Preconvention Meeting	14.45	
Salaries	2.38	
Incidental	3.00	851.55
To Entertaining Society:		
Duval	92.20	
Palm Beach	890.40	982.60
To General Fund	622.35	2,456.50
Cash Balance		\$ 0.00

EXHIBIT "D"

DUES AND ENTRANCE FEES COLLECTED APRIL 15, 1941 THROUGH MARCH 25, 1942

Name of Society	Total Members	No. Paid Members	No. In Arrears	1942 Dues Collected	Back Dues Collected	Entrance Fees
Alachua	30	21	9	\$ 160.00	\$ 160.00	\$ 20.00
Bay	10	9	1	60.00		
Brevard	11	9	2	80.00	20.00	
Broward	38	38	0	330.00		
Columbia	11	11	0	100.00	40.00	10.00
Dade	338	195	143	1,580.00	1,500.00	260.00
DeSoto-Hardee-Highlands-Charlotte-Glades	19	15	4	140.00	10.00	
Duval	189	147	42	1,170.00	30.00	50.00
Escambia	51	48	3	430.00	130.00	10.00
Franklin-Gulf	5	3	2	30.00	20.00	
Hillsborough	104	82	22	730.00	280.00	40.00
Individuals	1	0	1			
Jackson	10	10	0	80.00	20.00	
Lake	19	13	6	100.00	70.00	30.00
Lee	17	15	2	130.00	10.00	
Leon-Gadsden-Liberty-Wakulla-Jefferson	39	34	5	290.00	140.00	20.00
Madison-Suwannee	8	1	7		20.00	
Manatee	14	14	0	110.00	20.00	
Marion	27	24	3	150.00	60.00	20.00
Monroe	5	5	0	40.00		
Orange	88	77	11	660.00	120.00	20.00
Palm Beach	69	47	22	420.00	70.00	20.00
Pasco-Hernando-Citrus	14	12	2	100.00	10.00	
Pinellas	103	103	0	930.00	10.00	20.00
Polk	62	49	13	410.00	100.00	30.00
Putnam	10	7	3	50.00	40.00	
St. Johns	12	12	0	90.00	10.00	20.00
St. Lucie-Okeechobee-Indian River-Martin	18	18	0	140.00		10.00
Sarasota	16	9	7	70.00	60.00	20.00
Seminole	13	13	0	110.00	10.00	10.00
Taylor	5	5	0	40.00		
Volusia	46	35	11	280.00	70.00	40.00
Walton-Okaloosa	6	6	0	50.00	10.00	10.00
Washington-Holmes	6	6	0	50.00		
TOTALS	1,414	1,093	321	9,110.00	3,040.00	660.00
				3,040.00	Back Dues Collected	
				\$12,150.00	Total Dues Collected	
				660.00	Entrance Fees Collected	
				\$12,810.00	Dues and Entrance Fees	

EXHIBIT "E"

EARNINGS FROM ADVERTISING

April 15, 1941 through March 25, 1942

May, 1941	\$ 347.29
June	982.35
July	321.68
August	391.98
September	281.47
October	360.10
November	306.30
December	411.48
January, 1942	364.17
February	451.25
March	634.84
	<hr/>
	\$4,852.91
Refund. Cooperative Med. Adv. Bureau	432.70
Total	<hr/>
	\$5,285.61

ASSETS AND LIABILITIES

March 25, 1942

Assets

Cash in Bank	\$12,570.54
General Fund—Accounts Receivable	3,210.00
Journal & Directory Fund—Accts. Receiv.	518.50
Furniture, Fixtures & Equipment (less depreciation)	1,068.61
Library	681.70
Stationery Inventory	798.06
Savings: Atlantic National Bank	4,375.22
Barnett National Bank	9,029.08
Investment (Treasury Bond)	10,178.13
	<hr/>
	\$42,429.84

Liabilities

Medicolegal Aid to Dade Co. Med. Soc.	\$ 400.00
Capital Account	42,029.84
	<hr/>
	\$42,429.84

EMERGENCY FUND—(MEMORANDUM NO. 5)

(Taken from Treasurer's Financial Statement)

April 15, 1941 through March 25, 1942

Debit

Balance on Hand, April 15, 1941. (Overdraft)	\$ —1.17	
(Memorandum No. 4)		
Back Dues Collected (Exhibit "D")		
\$3,040.00 (304 members at \$2.50)	\$ 760.00	
Current Dues Collected (Exhibit "D")		
\$9,110.00 (911 members at \$2.50)	2,277.50	3,037.50
	<hr/>	
To Be Accounted for	\$3,036.33	
Less Amount Reserved for Working Budget and Expended	1,500.00	
	<hr/>	
Balance	\$1,536.33	

Credit

Committee Expenses:		
Postgraduate Course	\$ 500.40	
Legislative	1,794.09	
Council	292.19	
Executive	44.16	
Medical Preparedness	18.15	
Scientific Work	44.91	
Misc. Committee Expense	15.60	2,709.50
	<hr/>	
Balance (Overdraft)	—\$1,173.17	

Dr. Mark S. Dougherty, Jr., of Atlanta and Dr. F. Reavis of Waycross, official representatives of the Medical Association of Georgia,

were introduced.

Dr. Frank E. Burch of St. Paul, Minn., was introduced by Dr. S. B. Forbes, President of the Florida Society of Ophthalmology and Otolaryngology.

There being no further business, a motion to adjourn prevailed.

SECOND GENERAL SESSION

The meeting of the Florida Medical Association reconvened at 3:45 p. m., Tuesday, April 14, 1942, in the Assembly Room of the Hollywood Beach Hotel; President Jones in the chair.

The meeting was called to order.

The guest speaker, Dr. Daniel C. Elkin, Professor of Surgery, Joseph P. Whitehead Foundation, Emory University, Atlanta, Georgia, was introduced by Dr. Jones.

Address, "Injuries of the Chest" (lantern slides), by Dr. Elkin.

There being no further business, a motion to adjourn prevailed.

THIRD GENERAL SESSION

The meeting of the Florida Medical Association reconvened at 12:00 noon, Wednesday, April 15, 1942, in the Assembly Room of the Hollywood Beach Hotel; President Jones in the chair.

The meeting was called to order.

Dr. Jones announced that the registration at this convention was one of the largest ever had in the Florida Medical Association, there being 770 registered, of which 492 were doctors. This was felt to be a very creditable showing in view of the difficulties of transportation that exist at this time.

The chair recognized Dr. F. K. Herpel of West Palm Beach.

Dr. Herpel: I wish to offer a resolution of appreciation and thanks to Mr. Oscar Johnson and the personnel of the Hollywood Beach Hotel for the services which have been rendered to us during this convention.

It was moved and seconded that the resolution by Dr. Herpel be adopted. Motion prevailed.

Dr. White of St. Augustine was recognized by the chair.

Dr. White: I think we owe the Palm Beach County Medical Society a debt of gratitude for the wonderful entertainment during the meeting and I, as chairman of the Committee on Scientific Work, suggest we show our appreciation by a rising vote of thanks.

Rising vote of thanks accorded the Palm Beach County Medical Society.

A vote of thanks was also extended to Dr. Netto, general chairman, and his coworkers, for their cooperation.

The meeting then proceeded to the election of officers.

Dr. Eugene G. Peek of Ocala was nominated for president-elect by Dr. Harrison Walker. The nomination was seconded by Dr. Gerry Holden. Dr. Turberville moved that the nominations be closed and the secretary instructed to cast a unanimous ballot for Dr. Peek. Motion seconded and carried.

The president called for a rising vote unanimously electing Dr. Peek president-elect, and appointed Dr. Harrison Walker and Dr. Gerry Holden to escort Dr. Peek to the rostrum.

Dr. Peek: Mr. President, Members of the Florida Medical Association: The elaborate introduction made me look around to see if there wasn't another Dr. Peek in the house. I appreciate this honor. I pledge you now that I expect to spend the next twelve months as an intern, endeavoring to make you a good president when the time comes.

Nominations for first vice-president were called for. Dr. L. W. Blake of Bradenton was nominated by Dr. Boling of Tampa. It was moved and seconded that the nominations be closed and the secretary cast a unanimous ballot for Dr. Blake. Motion prevailed.

Nominations for the office of second vice-president were called for. Dr. Lloyd Netto of West Palm Beach was nominated by Dr. Leigh Robinson. Dr. Turberville moved that the nominations be closed and the secretary instructed to cast a unanimous ballot for Dr. Netto. Motion prevailed.

Nominations for the office of third vice-president were called for. Dr. Harrison Walker of Miami Beach was nominated by Dr. F. K. Herpel. It was moved and seconded that the nominations be closed and the secretary instructed to cast a unanimous ballot for Dr. Walker. Motion prevailed.

Nominations for the offices of secretary, treasurer and editor of the Journal were called for. Dr. Shaler Richardson of Jacksonville was nominated by Dr. H. E. White. It was moved and seconded that the nominations be closed and Dr. Richardson be unanimously elected. Motion prevailed.

At the request of the chair, a rising vote of thanks was accorded Dr. Richardson for the many years of faithful service he has rendered in this capacity.

Dr. Richardson: Mr. Chairman and Members of the Association: I assure you I again appreciate this honor.

It really is a joy to me to work with the members of this Association, and the various committees, because I know how thoroughly interested they are and what wholehearted effort they put into the work. Really this work is no burden for me because I enjoy every moment of it.

Dr. Jones: I have now reached that stage in my official capacity which is a most pleasant one, but it carries a certain bit of sadness along with it. However, I don't feel that I am retiring. I am simply giving the job over to a better man. I am sure you have something to look forward to during the coming year in the administration of Dr. Osincup.

The chair requested Dr. Chappell and Dr. Jelks to escort Dr. Gilbert S. Osincup to the rostrum.

Dr. Jones: Dr. Osincup, allow me to present to you the gavel of the Florida Medical Association. With it goes the authority of the job of president.

Dr. Osincup: I appreciate the honor of serving as your president for the coming year, and realize the grave responsibilities that fall on the shoulders of your leader. I pledge to serve the interests of our State Association to the best of my ability.

I would like to discuss briefly the crisis that is facing this Association, as well as the nation as a whole, with the understanding that what I say now is not for publication in the Journal.

Dr. Osincup recognized Dr. Edward Jelks of the Board of Past Presidents, who presented to the outgoing president, Dr. Walter C. Jones, the emblem worn by past presidents.

Dr. Jelks: Those of you who have witnessed this very happy ceremony in the past must feel, as I do, a certain sense of sadness now that we do not have with us today the past master in the presenting of this button, Dr. Ralph N. Greene, whom we all loved. He could do this with so many beautiful phrases, so much soaring of the emotions into the ether, that it certainly is a let down to have just a surgeon and not a psychiatric verbalist present this button today.

Dr. Greene, as you remember, devised this button years ago. He used three colors, white, green and gold, and he had a definite reason for putting each of these colors into this button. Each is significant of some fine attribute of our State.

The Florida Medical Association presents you, Dr. Jones, with this button for two reasons. One is an expression of appreciation for the work that you have done for us as the chief executive of the organization for the past year, and the other is a perpetual symbol of our good wishes to you from this year on in your life. You will wear it, I can testify from experience, as a reminder of happy association with the various members of the Florida Medical Association, so it is a great pleasure for me to have the honor of presenting you with this button and pinning it on your lapel.

Dr. Jones: I remember very distinctly Dr. Greene's presentation last year. And immediately upon my return home, Dr. Greene was one of the first men to call me up. He said, "I hope I may have the pleasure of presenting you with the Past President's button." We all agree with Dr. Jelk's expression.

Again I want to thank the members of the Florida Medical Association for their cooperation.

Dr. Osincup announced the names of the members who will serve as chairmen of the Association's regular committees.

The chair recognized Dr. J. R. Chappell who announced that there would be a meeting of the Board of Governors immediately following this session.

There being no further business, on motion duly made and seconded, the president sounded the gavel and declared the Sixty-Ninth Annual Meeting of the Florida Medical Association adjourned sine die.

SCIENTIFIC ASSEMBLIES

FIRST SCIENTIFIC ASSEMBLY

The Scientific Assembly convened at 7:00 p. m., Monday, April 13, in the Assembly Room of the Hollywood Beach Hotel, with Dr. Herbert E. White presiding.

The following papers were read and discussed:

1. "The Dermatologist in the Navy," Lieut. Lauren M. Sompayrac, MC-V(S) USNR, Naval Hospital, Jacksonville. (Read by Dr. J. F. Wilson).
2. "Roentgen Aids in the Diagnosis and Localization of Intracranial Conditions" (lantern slides), W. McL. Shaw and W. Tracy Haverfield, Jacksonville.
3. "Bed Rest in Coronary Thrombosis" (lantern slides), James A. Bradley, St. Petersburg.

SECOND SCIENTIFIC ASSEMBLY

The Second Scientific Assembly was held Tuesday, April 14, at 9:00 a. m., Dr. Herbert E. White presiding.

The following papers were read and discussed:

4. "Some Medical Problems of Flight" (lantern slides), Major Nathan S. Rubin, MC, Station Hospital, Tyndall Field, Florida.
5. "The Management of Severe Craniocerebral Injuries, with Special Reference to Compound and Penetrating Wounds" (lantern slides), J. G. Lyrly, Jacksonville.
6. "Wounds of the Abdomen" (lantern slides), J. W. Snyder, Miami.
7. "Burns, Various Types; Treatment and Prognosis from the Military as Well as the Civilian Viewpoint," Lieut. Commander Robert S. Widmeyer, MC-V(S) USNR, Naval Hospital, Jacksonville. (Read by Dr. Jos. Stewart).
8. "Shock" (lantern slides), Wilbur O. Arnold, West Palm Beach.

THIRD SCIENTIFIC ASSEMBLY

The Third Scientific Assembly was held Tuesday, April 14, at 2:00 p. m., Dr. Leland F. Carlton presiding.

The following papers were read and discussed:

9. "Lobectomy and Pneumonectomy; Report

of Eight Cases" (lantern slides), Kenneth A. Morris, Jacksonville.

10. "Perforated Peptic Ulcer; Some Experiences at Duval County Hospital" (lantern slides), Martin Mangels, Jr., and Edward Jelks, Jacksonville (from Department of Surgery, Duval County Hospital, Jacksonville).

FOURTH SCIENTIFIC ASSEMBLY

The Fourth Scientific Assembly was held Wednesday, April 15, at 9:30 a. m., Dr. Herbert E. White, presiding.

The following papers were read and discussed:

11. "Modern Diagnostic Procedures in Syphilis," L. C. Gonzalez, Jacksonville.
12. "The Use of Vitamin K in Obstetrics," Harold G. Nix, Tampa.
13. "Pyurias in Childhood; Their Significance and Treatment" (lantern slides), Warren W. Quillian, Coral Gables.
14. Clinicopathologic Conference, Lloyd J. Netto, Director, West Palm Beach; V. M. Johnson, Pathologist, West Palm Beach.

HOUSE OF DELEGATES

FIRST HOUSE OF DELEGATES

The House of Delegates convened at 3:00 p. m., Monday, April 13, 1942, in the Bamboo Room of the Hollywood Beach Hotel, Hollywood, with Dr. Walter C. Jones, president, in the chair. Delegates answering roll call are shown in regular type. Delegates not answering roll call are shown (*absent*).

DELEGATES

- ALACHUA—John E. Maines, Jr.
 BAY—(*Absent*, W. C. Roberts).
 BREVARD—T. C. Kenaston.
 BROWARD—Russell B. Carson, R. L. Elliston.
 COLUMBIA—(*Absent*, H. S. Howell).
 DADE—Homer L. Pearson, Joseph S. Stewart, M. Jay Flipse, John W. Snyder, Randolph Perdue, Ralph Sappenfield, W. Duncan Owens, Harrison A. Walker, C. Larimore Perry, W. L. Fitzgerald. (*Absent*, Thomas O. Otto).
 DeSOTO—HARDEE—HIGHLANDS—CHARLOTTE—GLADES—H. V. Weems.
 DUVAL—T. Z. Cason, R. B. McIver, W. McL. Shaw, Frederick J. Waas, Edward Jelks, L. Y. Dyrenforth, E. T. Sellers, Louie Limbaugh. (*Absent*, T. S. Field).
 ESCAMBIA—J. S. Turberville, C. C. Webb.
 FRANKLIN—GULF—(*No Delegate Designated*).
 HILLSBOROUGH—S. B. Forbes, L. F. Carlton, A. M. Bidwell, E. S. Gilmer, W. M. Rowlett.
 JACKSON—W. R. Wandeck.
 LAKE—J. F. McGuire.
 LEE—(*Absent*, H. Quillian Jones).
 LEON—GADSDEN—LIBERTY—WAKULLA—JEFFERSON—J. C. Davis, J. H. Pound.

MADISON—SUWANNEE—Irby Black.
MANATEE—B. M. Lancaster.
MARION—E. G. Peek.
MONROE—(*Absent, J. B. Parramore*).
ORANGE—T. E. McBride, J. R. Chappell, Frank D. Gray.
(*Absent, C. J. Collins*).
PALM BEACH—W. O. Arnold, J. R. Sory, W. Y. Sayad.
PASCO—HERNANDO—CITRUS—W. W. Jones.
PINELIAS—W. M. Davis, W. C. McConnell, A. L. Mills,
J. A. Herring, O. O. Feaster.
POLK—R. L. Cline, Herman Watson. (*Absent, J. R. Boulware*).
PUTNAM—Allen P. Gurganious.
ST. JOHNS—Herbert E. White.
ST. LUCIE - OKEECHOBEE - INDIAN RIVER - MARTIN—M. D. Council.
SARASOTA—John M. Butcher.
SEMINOLE—(*Absent, George H. Putnam*).
TAYLOR—W. J. Baker.
VOLUSIA—Ludo von Meysenbug, George M. Green.
WALTON—OKALOOSA—(*Absent, A. G. Williams*).
WASHINGTON—HOLMES—(*Absent, F. M. Watson*).
ASSOCIATION OFFICERS—Walter C. Jones, Gilbert S. Osincup, Frederick K. Herpel, Shaler Richardson. (*Absent, Luther W. Holloway, Walter C. Payne*).

Sixty-two delegates answered roll call and the chair declared a quorum present.

It was moved and seconded that the minutes of the last meeting, as published in the June, 1941 issue of the Florida Medical Journal, be adopted. There being no corrections or amendments, the minutes as published were adopted by unanimous vote.

The chair announced the personnel of three reference committees as follows:

1. HEALTH AND EDUCATION

Homer L. Pearson, Chairman
Frank D. Gray
William M. Davis
T. C. Kenaston
W. McL. Shaw

2. PUBLIC POLICY

Gilbert S. Osincup, Chairman
Russell B. Carson
W. M. Rowlett
Herman Watson
J. S. Turberville

3. FINANCE AND ADMINISTRATION

Shaler Richardson, Chairman
Howard V. Weems
W. Duncan Owens
Frederick K. Herpel
Eugene G. Peek

Our delegates to the A. M. A. House of Delegates were then recognized.

Dr. Mallory responded: We have no supplementary report to make at this time.

Dr. Jelks: I have no further report.

Dr. Jones called for the nomination of one delegate to the House of Delegates of the A. M. A. for a two-year term beginning January, 1943. Dr. Edward Jelks was nominated by Dr. Rowlett; seconded by Dr. White and Dr. Feaster.

Moved that the nominations be closed and the secretary be instructed to cast a unanimous ballot for Dr. Jelks. Motion prevailed.

Dr. Jones: We are fortunate in having a man who can represent us so ably in the A. M. A.

The chair called for nominations for an alternate. Dr. Feaster of St. Petersburg was nominated by Dr. Carlton, seconded by Dr. Herpel. A motion to close the nominations and declare Dr. Feaster elected as alternate prevailed.

A resolution was read by Dr. L. M. Rozier, concerning the dispensing of contraceptive advice by private physicians and maternity clinics throughout the state. On motion the resolution was received and referred by the chair to Reference Committee No. 1, Health and Education.

A resolution was read by Dr. von Meysenbug, concerning milk truck deliveries. On motion the resolution was received and referred by the chair to Reference Committee No. 2, Public Policy.

A resolution was read by Dr. Frank Gray, concerning instructions to our A. M. A. Delegates regarding the present unapproved status of University of Georgia School of Medicine. On motion the resolution was received and referred by the chair to Reference Committee No. 2, Public Policy.

A resolution was read by Dr. Homer Pearson for Dr. F. H. Dieterich. This resolution dealt with the present coroner system in Florida. On motion the resolution was received and referred by the chair to Reference Committee No. 1, Finance and Administration.

A recommendation from the Executive Committee that the 1943 annual meeting be held in St. Petersburg was read by Dr. Limbaugh. It was moved and seconded that this recommendation be adopted. Motion prevailed and St. Petersburg declared the convention city for 1943.

The report of the Executive Committee was read by Dr. Louie M. Limbaugh, chairman. On motion the report was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

The report of the Committee on Scientific Work was read by Dr. H. E. White, chairman. On motion the report was received and referred by the chair to Reference Committee No. 1, Health and Education.

In the absence of the chairman, Dr. George D. Lilly, no report of the Publication Committee was presented.

The report of the Committee on Legislation and Public Policy was read by Dr. Harold D. Van Schaick, chairman. On motion the report was received and referred by the chair to Reference Committee No. 2, Public Policy.

received and referred by the chair to Reference Committee No. 2, Public Policy.

The Report of the Committee on Public Relations, submitted by Dr. J. Ralston Wells, chairman, was received and referred by the chair to Reference Committee No. 2, Public Policy.

In the absence of the chairman, Dr. H. A. Barge, the report of the Committee on Necrology was read by the secretary, Dr. Shaler Richardson. At the request of the president the members stood for a moment in silent respect to the memory of departed colleagues. On motion the report was then received and referred by the chair to Reference Committee No. 1, Health and Education.

The report of the Committee on Medical Postgraduate Course was read by Dr. T. Z. Cason, chairman. On motion this report was received and referred by the chair to Reference Committee No. 1, Health and Education.

The report of the Committee on Cancer Control was read by Dr. Alfred G. Levin, chairman. On motion this report was received and referred by the chair to Reference Committee No. 1, Health and Education.

The report of the Committee on Medical Economics was read by Dr. Harrison A. Walker, chairman, and on motion, was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

The report of the Committee on Venereal Disease Control was read by Dr. E. T. Sellers, chairman. On motion this report was received and referred by the chair to Reference Committee No. 2, Public Policy.

The report of the Committee of Interrelationship was read by Dr. Henry J. Peavy, chairman. On motion this report was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

The report of the Committee on Tuberculosis and Public Health was read by Dr. M. Jay Flipse, chairman, and on motion, was received and referred by the chair to Reference Committee No. 2, Public Policy.

The report of the Committee on State Controlled Medical Institutions was read by Dr. R. D. Thompson, chairman, and on motion, was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

The report of the Committee on Maternal Welfare was read by Dr. L. M. Rozier, chairman, and on motion, was received and referred by the

chair to Reference Committee No. 1, Health and Education.

The report of the Committee on Child Health was read by Dr. Warren W. Quillian, chairman, and on motion, was received and referred by the chair to Reference Committee No. 1, Health and Education.

The report of the Committee Advisory to the Woman's Auxiliary, at the request of the chairman, Dr. Gordon H. Ira, was read by Dr. Shaler Richardson, secretary. On motion this report was received and referred by the chair to Reference Committee No. 2, Public Policy.

Dr. Richardson, at Dr. Ira's request, announced that the Woman's Auxiliary had placed in the lobby of the hotel a Physician's Account Book dating back to the year 1807, which it was thought would be of particular interest to the members of this Association, as it set forth numerous charges.

The report of the Council was read by Dr. W. Duncan Owens, chairman, and on motion, was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

A verbal report of the Committee of Representatives to the Industrial Council was given by Dr. J. C. Davis, chairman. Dr. Davis stated briefly that Mr. Williams, Chairman of the Industrial Commission, had been contacted both by telephone and in person, the last contact being made last week. At each of these times Mr. Williams assured the committee that all claims had been adjusted to the satisfaction of the carrier, employer and employee; that there were no other grievances, and that he would be glad to call upon the committee at any time on matters where the committee's counsel was needed.

In the absence of the chairman, Dr. William E. Ross, no report was made by the Board of Past Presidents.

The report of the Committee on Medical Preparedness was read by the chairman, Dr. Edward Jelks. On motion this report was received and referred by the chair to Reference Committee No. 3, Finance and Administration.

A fourteen page report of the N. Y. A. on 1,016 youths was submitted by Dr. T. Z. Cason with the recommendation that this report be analyzed and a certain amount be published as information in the Journal. On motion this report was received and referred by the chair to Reference Committee No. 2, Public Policy.

Dr. Jones read a telegram from the Command-

er of the Naval Air Station at Jacksonville, explaining the absence of men in the Naval Service.

Announcement was made of the time and place for holding Reference Committee meetings.

There being no further business to come before the meeting, on motion seconded and carried, the House recessed at 5:30 p. m. to reconvene Tuesday, April 14th at 4:30 p. m.

SECOND HOUSE OF DELEGATES

The House of Delegates reconvened at 4:30 p. m., Tuesday, April 14, 1942 in the Theater of the Hollywood Beach Hotel, Hollywood; President Jones in the chair. Delegates answering roll call are shown in regular type. Delegates not answering roll call are shown (*absent*).

DELEGATES

ALACHUA—John E. Maines, Jr.
BAY—(*Absent*, W. C. Roberts).
BREVARD—T. C. Kenaston.
BROWARD—Russell B. Carson, R. L. Elliston.
COLUMBIA—(*Absent*, H. S. Howell).
DADE—Homer L. Pearson, Joseph S. Stewart, M. Jay Flipse, John W. Snyder, Randolph Perdue, Ralph Sappenfield, W. Duncan Owens, H. A. Walker, Thomas O. Otto. (*Absent*, C. Larimore Perry, W. L. Fitzgerald).
DESOTO-HARDEE-HIGHLANDS-CHARLOTTE-GLADES — H. V. Weems.
DUVAL—Frederick J. Waas, L. Y. Dyrenforth, E. T. Sellers, Louie Limbaugh. (*Absent*, T. Z. Cason, R. B. McIver, W. McL. Shaw, Edward Jelks, T. S. Field).
ESCAMBIA—J. S. Turberville, C. C. Webb.
FRANKLIN-GULF—(*No Delegate Designated*).
HILLSBOROUGH—S. B. Forbes, L. F. Carlton. (*Absent*, A. M. Bidwell, E. S. Gilmer, W. M. Rowlett).
JACKSON—W. R. Wandeck.
LAKE—J. F. McGuire.
LEE—(*Absent*, H. Quillian Jones).
LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON—J. C. Davis, J. H. Pound.
MADISON-SUWANNEE—(*Absent*, Irby Black).
MANATEE—B. M. Lancaster.
MARION—E. G. Peek.
MONROE—J. B. Parramore.
ORANGE—T. E. McBride, J. R. Chappell, Frank D. Gray. (*Absent*, C. J. Collins).
PALM BEACH—W. O. Arnold, W. Y. Sayad. (*Absent*, J. R. Sory).
PASCO-HERNANDO-CITRUS—(*Absent*, W. W. Jones).
PINELLAS—W. M. Davis, W. C. McConnell, J. A. Herring, O. O. Feaster. (*Absent*, A. L. Mills).
POLK—Herman Watson. (*Absent*, R. L. Cline, J. R. Boulware).
PUTNAM—Allen P. Gurganious.
ST. JOHNS—(*Absent*, Herbert E. White).
ST. LUCIE - OKEECHOBEE - INDIAN RIVER - MARTIN—M. D. Council.
SARASOTA—John M. Butcher.
SEMINOLE—(*Absent*, George H. Putnam).
TAYLOR—W. J. Baker.
VOLUSIA—Ludo von Meysenbug. (*Absent*, George M. Green).
WALTON-OKALOOSA—(*Absent*, A. G. Williams).
WASHINGTON-HOLMES—(*Absent*, F. M. Watson).
ASSOCIATION OFFICERS—Walter C. Jones, Gilbert S. Osincup, Frederick K. Herpel, Shaler Richardson. (*Absent*, Luther W. Holloway, Walter C. Payne).

Forty-eight delegates answered roll call and the chair declared a quorum present.

The meeting was called to order.

REPORT OF REFERENCE COMMITTEE NO. 1

Dr. Homer L. Pearson, Chairman of Reference Committee No. 1, Health and Education, was recognized and asked to present the recommendations of that committee.

"The Committee recommends the adoption and publication of the resolution presented by the Committee on Maternal Welfare, Dr. L. M. Rozier, chairman."

RESOLUTION

WHEREAS, The Maternal Welfare Committee of the Florida Medical Association has been given the responsibility of investigating and recommending action to the Association on matters pertaining to maternal welfare, and

WHEREAS, The death rate due to conditions associated with pregnancy in Florida is higher than any other State in the United States, and

WHEREAS, The Florida Medical Association at its meeting held in Ocala in May, 1935, sought leadership from the American Medical Association with regard to the dissemination of fertility information in cases where it is necessary to conserve the life or health of mothers, and

WHEREAS, The public looks to the medical profession for leadership in medical and scientific matters involving the health of the women of the State, therefore be it

RESOLVED: That the Florida Medical Association encourages physicians to accept responsibility for giving such information relating to pregnancy-spacing and fertility as each physician may deem necessary to his patient, and reaffirms its belief in the physician-patient relationship, and be it further

RESOLVED: That the Association approves this principle in connection with the maternity clinics being conducted by the State Board of Health for indigent patients.

Motion made and seconded that the above resolution be adopted and published. There was no discussion and the motion prevailed.

"The Committee recommends the adoption and publication of the resolution by Dr. F. H. Dieterich, concerning coroners and the coroner system in Florida."

RESOLUTION

WHEREAS, The State Law of Florida, in regard to the investigation of deaths under certain circumstances, provides for the election of a Coroner and specifies his duties; and

WHEREAS, The law does not require medical qualifications of the Coroner, even though his actual duties require medical knowledge as to causes of death; and

WHEREAS, A system, known as the Medical Examiner System, has been devised by other States, notably Massachusetts, New York and Maryland, to perform the duties of Coroner; and

WHEREAS, The Medical Examiner System appears to offer certain advantages not apparent in the Coroner System as provided by the Florida State Law, be it therefore

RESOLVED BY THE HOUSE OF DELEGATES: in its annual session, that the Legislative Committee be instructed to investigate the merits of the two systems and to report its findings to the Executive Committee. And be it further

RESOLVED: That the Executive Committee shall be hereby empowered to authorize the Legislative Committee to foster any changes in legislation which may appear desirable as a result of their investigation.

Motion made and seconded that the above resolution be adopted and published. There was no discussion and the motion prevailed.

"The Committee recommends that the report of the Committee on Scientific Work be received and published." It was moved and seconded that this report be received and published. Motion prevailed.

REPORT OF COMMITTEE ON SCIENTIFIC WORK

The scientific program to be presented at four sessions varies somewhat from that of previous years. Your Committee on Scientific Work has spent considerable time and effort in preparing a program of definite interest. Essayists were chosen whose subjects pertain to the progress of medical science or to conditions caused by the war.

Tuesday forenoon will be devoted to war problems. This session will be followed by the Association's guest speaker, Dr. Daniel C. Elkin of Atlanta. The other three scientific sessions should be equally interesting, as the essayist, as well as the discussors, have been carefully selected.

The opening time of the Tuesday morning session has been scheduled for 9 o'clock, and the Wednesday morning session for 9:30, as designated on your program. The time has been made as late as possible, in order that there may be a good attendance for the first paper. It is very important that our members and guests assemble promptly; the members of your Committee feel that the first essayist is entitled to full attendance when he is called to the platform.

A notice was run for several months in your Journal, soliciting applications for places on the scientific program. This was done in order that good papers would not be overlooked when the final program was arranged. Circular letters were not mailed to all members of the Association soliciting papers, as has been done many times in previous years. The response from the circular letter a year ago was so meager that it was decided to eliminate it this year. Many of the essayists on this year's program volunteered, and others were drafted.

The program includes such subjects as war problems, surgery, general medicine, the specialties, and closes with a clinicopathologic conference. Consideration was given to the geographical location of the essayists, in order that members from the entire state may have equal representation. It is the desire of your Committee on Scientific Work to prepare the type of scientific program of interest to the majority of the members. We, therefore, urge that suggestions be offered by the membership for our guidance, so that these scientific programs may be improved from year to year.

I wish to acknowledge with deep appreciation the co-operation of Drs. Leland F. Carlton, Charles J. Collins, Robert B. Harkness, Homer L. Pearson and James H. Pound, the other members of the Committee on Scientific Work, as well as that of the Army and Navy, and the help and suggestions received from officers and members of the State Association.

Respectfully submitted,
Herbert E. White, *Chairman*.

"The Committee recommends that the report of the Committee on Necrology be received and published." It was so moved and seconded. Motion prevailed.

REPORT OF COMMITTEE ON NECROLOGY

During the past year our Association lost by death the members whose names are listed below:

Thomas S. Anderson, Live Oak
Henry Bacon, Jacksonville
Kenneth R. Bell, Sanford
Z. Brantley, Grandin
A. T. Eide, Lake Placid
S. H. Etheredge, Tampa
Ralph N. Greene, Coral Gables
Jack Halton, Sarasota
J. Kent Johnston, Tallahassee
A. W. Knox, Sanford
Earl C. MacCordy, St. Petersburg
Charles R. Marney, Tampa
Robert D. May, Jacksonville
Benjamin E. Miller, New Smyrna Beach
John H. Mills, Tampa
Mitchell L. Moran, St. Petersburg
Richard C. Travis, Miami Beach

When possible, obituaries have appeared in the Journal relative to the deaths of these doctors. Tributes have been paid to them in the different communities where they have practiced.

May we at this time stand in a moment of silence, in reverence and respect to the memory of our departed colleagues.

Respectfully submitted,
H. A. Barge, *Chairman*.

"The Committee recommends that the report of the Committee on Medical Postgraduate Course be received and published." It was moved and seconded. Motion prevailed.

REPORT OF COMMITTEE ON MEDICAL POSTGRADUATE COURSE

The Ninth Annual Graduate Short Course was held at the George Washington Hotel in Jacksonville, Florida, June 23 to 28, inclusive. The total attendance was 132. Of these, 36 were from the Army and the Navy, and 24 were Negro doctors. After all the expenses of this Short Course were paid, there was left in the treasury \$496.94, which meant that of the original \$500.00 appropriated, the entire amount was still present in the treasury except for \$3.06. It is anticipated that this year we will pay the lecturers as soon as they present their expense accounts while still in Florida. This meant extra funds were needed. The Executive Committee, therefore, advanced an additional \$500.00. There is now in the treasury \$996.94. This year, for the first time, all lecturers are allowed an honorarium of \$25.00 per day for each teaching day. This sum is allowed by the government for such services, and the Committee felt it necessary to allow an honorarium that we might secure instructors.

The Short Course will be held again this year in Jacksonville at the George Washington Hotel. Provision has been made to take care of reservations in moderately priced hotels and boarding houses for those who desire this accommodation. These accommodations may be secured by addressing Dr. Stewart G. Thompson, Florida Medical Association, 128 East Forsyth Street, Jacksonville.

In spite of many difficulties due to the present emergency, the Committee feels that it has maintained previous high standards in its instructors. The members of the Florida Medical Association registering for the Medical Postgraduate Course this year will be registered by the University of Florida in its Graduate School. The Committee would like to have considered for approval further extension of graduate work, possibly one or two days at each of the district meeting places in the fall.

Respectfully submitted,
T. Z. Cason, *Chairman*.

"The Committee recommends that the following supplement presented by Dr. Cason be included in the report of the Committee on Medical Postgraduate Course."

SUPPLEMENT

It is the desire of the Committee to have a one-day course presented on the day preceding the Annual Meeting of each Medical District; that men specializing in various subjects in the State of Florida be asked to present these courses under the supervision of the Committee on Medical Postgraduate Course; that a registration fee of not over \$1.00 be charged for the course, and that only one subject be taken up at any one particular meeting. The choice of teachers will be worked out by the Committee on Medical Postgraduate Course.

It was moved, seconded and carried that this supplement become a part of the report of the Committee on Medical Postgraduate Course.

"The Committee recommends that the report of the Committee on Cancer Control be received and published, and that Mr. William Taradash of Miami Beach be thanked by the Florida Medical Association for his contribution of \$1,000 for the publication of the booklet prepared by the Committee on Cancer Control." Motion made and seconded that this recommendation be adopted. Motion prevailed.

REPORT OF COMMITTEE ON CANCER CONTROL

The Committee on Cancer Control is unable to report any brilliant progress toward an adequate attack on the cancer problem in this state but feels that some important ground-work has been laid and that prospects for the future are not entirely hopeless.

We continue to encounter a deplorable lack of interest among our physicians in even the larger communities in the establishment of tumor clinics. At the last recording only one accepted clinic was listed in Florida as compared to fourteen in our neighbor state of Georgia. As the civilian supply of physicians continues to decrease in the present emergency the advisability of setting up new clinics may appear questionable. We feel, however, that now, more than ever, the middle-aged and older civilian groups remaining at home must be closely guarded against the unnecessarily high losses occurring from malignant disease. In addition to the absence of diagnostic or treatment centers we are handicapped by the lack of any provisions for state aid in the management of indigent cancer cases. We hope to obtain cooperation of our own Legislative Committee in setting some machinery in motion towards the passage of an adequate bill such as is now in force in several other progressive states.

We have continued to act as an Executive Committee for the Women's Field Army. The Florida division of this auxiliary to the American Society for the Control of Cancer has untiringly and unselfishly worked towards spreading cancer education among the laity and deserves much more support from organized medicine than it has been receiving. We wish to particularly commend Mrs. A. Malcolm Smith, the State Commander of the Women's Field Army, for her intelligent and untiring efforts in this cause. We have recently been able to obtain some much needed financial help for this group but more help is needed. We know of no finer use for so-called "Memorial Funds" than in aiding the work of the Women's Field Army in this state or in prompting the establishment of tumor clinics.

We are in the process of preparing a manual on the Fundamentals of Cancer Diagnosis and Treatment which

will be distributed gratis to every physician in Florida. The funds (\$1,000.00) for the publication of this booklet are being provided by Mr. William Taradash of Miami Beach in memory of his late wife, a cancer victim.

Respectfully submitted,
Alfred G. Levin, *Chairman*.

"The Committee recommends that the report of the Committee on Maternal Welfare be received and published."

It was moved and seconded that the report be received and published. Motion prevailed.

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

The activities of your Maternal Welfare Committee for the past year have largely been those of cooperating with the State Board of Health, particularly its Bureau of Maternal and Child Health, which is so ably directed by Dr. R. C. Hood.

It has been felt that the size and importance of this Bureau is so great and the problems so many that it could be better covered by having a full time obstetrical consultant to help Doctor Hood, who is essentially a pediatrician and naturally feels more at home in that part of the Bureau. Your Committee has cooperated with him in going over the qualifications of several doctors who might be available for the place. Due to the demands of the Military and Naval Services we have not been able to finish this work, though there are good prospects that it may be finished soon. It is the idea of your Committee that with such a person on the job, statistical information may be more readily obtained, observation and control of midwifery can be more complete and physicians removed from the urban medical centers can have some degree of consultant service not available at present. At the time it seems desirable, and your Committee recommends development of a consultation service modeled after a plan at present operating in Connecticut, with the County or other suitable unit as a basis for the formation of the consultant groups.

An obstetrical consultant under the State Board of Health's Bureau of Maternal and Child Health would be an invaluable adjunct to such a group of committees developed by your Maternal Welfare Committee and we feel could result in a decided improvement in our maternal death rate.

Another matter in which your committee has cooperated with your State Board of Health has been in a rewriting of the Sanitary Code as regards midwife regulations, to put them more completely under the control of the medical profession. The State Board of Health is also in the process of preparing a Midwife Manual for their instruction and guidance. Material for this manual has been presented to your Committee for examination and I am sure, with a little time and much work by the State Board of Health and your future committees, will result in a much higher type of work by the midwives.

Application and enforcement of the new regulations and instructions will be much easier if full organization of local consultant groups within the medical profession, which were mentioned previously, can be worked out by your Committee in the near future. This probably would be difficult enough in normal times and under present conditions will probably be more difficult though the demands are all the more urgent. Only by organized effort will we be able to carry on.

Respectfully submitted,
L. M. Rozier, *Chairman*.

"The Committee recommends that the report of the Committee on Child Health be received and published."

It was moved and seconded that the report be received and published. Motion prevailed.

REPORT OF COMMITTEE ON CHILD HEALTH

Upon the members of the medical profession falls the responsibility of keeping fit the children of Florida during the trying days that are ahead of us. Efforts are being made to coordinate the activity of the State Board of Health's Bureau of Maternal and Child Health with that of the Committee on Child Health of the Florida Medical Association. The latter group is serving in an advisory capacity and actively with Doctor Robert C. Hood in attacking local problems related to child health. At a recent meeting of the Committee plans were discussed for providing specialized pediatric consultation service to rural practitioners in the various districts of the state medical organization.

Care for the children of indigents and local child welfare problems must necessarily be met and managed in the individual communities. Your Child Health Committee is willing to help and often does assist in the solution of these problems. It is felt that activity of this type should be unofficial and sponsored by the individual physician since there are no funds available for a statewide organized effort.

Members of the Child Health Committee are serving on various committees of the State Defense Council; helping with the plans for evacuation of women and children from embattled areas; taking part in the physical fitness program; addressing district groups engaged in the study of nutrition; and assisting the war effort through the medium of existing agencies. Child health demands physical fitness, mental courage, and adherence to certain moral and spiritual ideals. This involves the cooperation and coordinated activity of physicians with educators, the clergy, and all agencies, both military and civilian, which are engaged in an improvement of tomorrow's citizen, the child of today.

This is an individual responsibility. It would seem desirable for each member of the Florida Medical Association to exert an effort in the interest of Child Health and to apply the following program in his home town:—

1. Every child should have capable health supervision.
2. Every child must be offered the prevention of contagious diseases, especially diphtheria and smallpox.
3. This child health service should be available to:
 - a. Children of families dislocated by the war; children of industrial defense workers and of members of the armed forces stationed in the community.
 - b. Children of migratory workers and indigent families.
 - c. Assistance is needed in community, county and state organizations for directing the rehabilitation and care of children in the event of evacuation, disaster, black-outs, etc.

This year, with the changes incident to war and defense industry, there is an increased danger of epidemics of communicable disease. By special proclamation the President of the United States has urged that in celebration of May Day, a definite effort be made to secure immunization of all children over the age of nine months against smallpox and diphtheria.

The Child Health Committee feels that the yearly refresher course, sponsored by the Committee on Medical Postgraduate Course, under the able leadership of Dr. T. Z. Cason, is of increasing value as applied to child health in the State. The annual pediatric seminar conducted for two weeks at Saluda, N. C., and led by Dr. D. Lesesne Smith, is also a potent force in preparation of the general practitioner for his problems in child care. Proper conservation of the health of infants and children in the state demands that more general use be made of these facilities for postgraduate education in pediatrics.

Our children must not be denied the opportunity to lead happy and useful lives in the world of tomorrow. Child health is our responsibility today.

Respectfully submitted,

Warren W. Quillian, *Chairman.*

"The Committee recommends that the report of the Committee on Medical Education and Hospitals be received and published." Motion made and seconded that this report be received and published. Motion prevailed.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Your chairman has endeavored, with the cooperation of the other members of this Committee, to make a comprehensive survey of the hospitals of the state, most importance being placed, of course, on the equipment, personnel and type of practice allowed in the institutions. This investigation was not limited to hospitals approved by the American Medical Association or the American College of Surgeons. In reviewing the data received from the members of this committee, obtained chiefly from the secretaries of the various county societies, it appears that here and there throughout the state are a few smaller hospitals not already approved which are sufficiently adequately equipped and staffed to be included in the list approved by the State Association. However, I do not know the specific requirements necessary for approval, if there are such, and consequently know no criteria upon which to base a classification.

The most recent list of hospitals found in the Florida Medical Directory has been reviewed and we feel that these are acceptable. However, as has been said, there are other hospitals which, if the facts were known, probably should be included in this list. It is suggested, therefore, that the secretaries of the various county societies be requested to ask the superintendent of each hospital in his section to write to the Chairman of the Committee on Medical Education and Hospitals at an early date giving all essential information relative to the size of the hospital, equipment, staff, etc., in order that steps may be taken to have all qualified hospitals on the list.

Respectfully submitted,

John S. Helms, Jr., *Chairman.*

"The Committee respectfully calls the attention of the Executive Committee to the fact that most of the duties of this Committee are a duplication of the work carried on by the A.M.A. and the American College of Surgeons.

"We therefore recommend that the Committee's studies go further into the location and operation of those smaller hospitals and other hospitals not listed by the A.M.A., and that its findings be included in its annual report for the information of our members."

Motion prevailed and the above recommendation was adopted.

"Committee No. 1 on Health and Education wishes to commend especially the Committee on Medical Postgraduate Course, the Committee on Cancer Control and the Committee on Child Health for the excellent work done by them over the past few years."

REPORT OF REFERENCE COMMITTEE NO. 2

Dr. Gilbert S. Osincup, chairman of Reference Committee No. 2, Public Policy, was recognized and asked to present the recommendations of that committee.

"The Committee recommends that the resolution concerning milk truck deliveries presented by Dr. von Meysenbug for the Florida Pediatric Society be amended by enlarging the last paragraph to include the horse problem in Florida." Motion made and seconded that the resolution as amended be published and transmitted to Mr. Henderson. Motion prevailed.

RESOLUTION

WHEREAS, the United States priority board will not allow milk trucks to renew tires for distribution of milk to private consumers in Florida, so that when present tires are worn out, there will be no more distribution of milk to private consumers; and

WHEREAS, in our hot summer climate the distribution of milk is now on alternate days, this will create a grave danger to the children of this State, particularly among the children of families whose income is too small to provide refrigeration that will safeguard milk for forty-eight hours, therefore, be it

RESOLVED: that the Florida Medical Association appeal to Mr. Henderson that the Board, if possible, rescind the order of priorities so that milk can again be delivered daily without the ultimate stoppage of home deliveries from lack of tires, since the use of horses is out of the question.

"The Committee recommends that the resolution by Dr. Frank Gray concerning instructions to our A.M.A. delegates regarding the present unapproved status of the University of Georgia School of Medicine be adopted as amended by the Reference Committee." It was moved and seconded that the following amended resolution be adopted. Motion prevailed.

RESOLUTION

WHEREAS, The Council on Medical Education and Hospitals of the American Medical Association has removed the University of Georgia School of Medicine from its approved list of medical schools, and

WHEREAS, During its session at Chicago on February 15 the chairman and members of this Council agreed, at the request of Dean G. Lombard Kelly, to qualify its resolution to the effect that its action had no reference to the quality of medical education being offered in this School, and

WHEREAS, This action causes unjustified embarrassment to the many graduates of the University of Georgia School of Medicine practicing in Florida; We, the members of the House of Delegates of the Florida Medical Association in session, April 14, 1942, at Hollywood, Florida,

RESOLVE: That our delegates to the American Medical Association be instructed to support any action taken by the delegates of the Medical Association of Georgia with a view of correcting this unfortunate state of affairs and in restoring the Medical Department of the University of Georgia to an approved status.

"The Committee recommends that the report of the Committee on Legislation and Public Policy be adopted as amended." It was moved and seconded that the following amended report be adopted. Motion prevailed.

REPORT OF COMMITTEE ON LEGISLATION AND PUBLIC POLICY

The Florida State Legislature was in session during the meeting of the Florida Medical Association in Jacksonville in 1941, so the detailed report of your Committee's activities was given verbally to the attending members of the various sectional meetings held in the fall of 1941. Briefly, all adverse legislation was successfully handled and our own bill, affecting the Florida State Board of Medical Examiners, was made a statute.

In order to strengthen our position and lay the groundwork for a better functioning and more active organization, at a conference attended by Dr. Walter Jones, President, Dr. Gilbert Osincup, President-elect, and your Chairman, it was decided to ask the president of each component society to select one of his members who would familiarize himself with the work and act as a liaison between the State Legislative Committee and the members of his Society and continue from year to year. These appointees will in no way lessen or take over the activities of the members of the Committee as appointed by the President of the State Association.

The balance of the work of the Committee has been along general and national lines and preparing for the spring of 1943.

Respectfully submitted,
Harold D. Van Schaick, *Chairman*.

AMENDMENT BY REFERENCE COMMITTEE NO. 2— PUBLIC POLICY

Each member of the Association's Committee on Legislation and Public Policy (who represents a medical district) shall be empowered to appoint from each county in his medical district an Association member whose term shall coincide with that of his own, and who shall act as a liaison between the Committee on Legislation and Public Policy, and the Component Society.

It shall be the duty of each liaison appointee to secure the cooperation of as many members in his county society as he deems necessary to carry out the intent and purpose of this recommendation.

"The Committee recommends that the report of the Committee on Public Relations be received and filed." It was moved and seconded that the report be received and filed. Motion prevailed.

REPORT OF COMMITTEE ON PUBLIC RELATIONS

The year 1941-42 has seen several of us enter the services of the armed forces; others have taken on new duties in a home defense setup. There were three meetings during the year; at each meeting two members were present. Policies and places have been discussed but no active program has been carried out.

The Radio Station W.R.U.F. has been ready to assist at any time and we still have the blank records amounting to \$47.00 deposited with that station.

This Committee has a potential strength for distributing vital facts and propaganda if and when necessary. We suggest that this fact be kept in view by other committees, especially medical procurement.

Respectfully submitted,
J. Ralston Wells, *Chairman*.

"The Committee recommends that the report of the Committee on Venereal Disease Control be received and published." It was moved and seconded that the report be received and published. Motion prevailed.

REPORT OF COMMITTEE ON VENEREAL DISEASE CONTROL

A SURVEY

A letter was written to the Chairman of each Venereal Disease Control Committee in 30 different states. It was requested in this letter that we be informed what the different states were doing in regard to the venereal disease control work; as to the activity of the Public Health Service and as to the facilities for diagnosing and treating the diseases. We received 27 answers, and we believe from these answers that our work in venereal disease control is comparable to that of any other state and is of about the same kind. Apparently the best results were had in those states in which there was close cooperation between organized medicine and health departments.

SHORT COURSE IN VENEREAL DISEASES

A Venereal Disease Section in the Annual Medical Postgraduate Course has been organized through the joint efforts of the Committee on Education, the Committee on Venereal Disease and the State Board of Health. The Committee, in cooperation with the Committee on Education and the Bureau of Education of the State Board of Health, was instrumental in securing a venereal disease scholarship to be offered to a member of each medical society to attend the short course in June.

Each scholarship is in the amount of \$25.00 and will be awarded to a member of each county medical society. The physician to receive the scholarship shall be designated by the members of the county medical society. The only qualification of the candidate for the scholarship is that he be a general practitioner of medicine.

The physician receiving the scholarship will be requested to attend the lectures and clinics of the Short Course which relate to venereal diseases and to make a report of the lectures to his local society.

OTHER EDUCATIONAL ENDEAVORS

From time to time supplements on venereal disease control information are issued by the United States Public Health Service and sent to the various state boards of health. These supplements contain authentic and valuable information on the diagnosis and treatment of syphilis. Through the cooperation of the Section on Venereal Disease Control your Committee has enclosed a letter in each supplement calling attention to the value of the information. These supplements are mailed to each physician in the state.

The Florida State Board of Health has acquired a technical film, in color, on the diagnosis and treatment of syphilis which is being shown to all medical societies through the sponsorship of the Venereal Disease Control Committee.

LABORATORY FACILITIES

The laboratory facilities of the State Board of Health have been greatly increased. Venereal disease laboratory services offered free to all private practitioners at the present time include: blood and spinal fluid serologic examinations, GC smears and cultural examinations, blood level determination of sulfonamides.

The State Board of Health laboratories have been evaluated for the last two years by the National Evaluation Study Committee, which considers the efficiency of serologic tests of laboratories in all States. All the State Board of Health laboratories have been approved.

VENEREAL DISEASE CLINICS

Many venereal disease clinics have been established for the treatment of the indigent within the last twelve months. There are now 110 being operated in the state.

EDUCATIONAL FACILITIES FOR THE PUBLIC

Many thousands of pamphlets have been distributed in the state through the Bureau of Public Education. Radio programs, sponsored by the Social Hygiene Association, civic organizations and other public institutions, have been put on from time to time. In addition, educational films have been shown at public gatherings.

The chairman of this Committee wishes to express sincere appreciation to the Venereal Disease Control Officer and the Librarian of the Florida State Board of Health, as well as to many others who have given us so much help in carrying on the venereal disease control campaign.

Respectfully submitted,

E. T. Sellers, *Chairman.*

"The Committee recommends that the report of the Committee on Tuberculosis and Public Health be received and published." It was moved and seconded that the report be received and published. Motion prevailed.

REPORT OF COMMITTEE OF TUBERCULOSIS AND PUBLIC HEALTH

During the last year your Tuberculosis and Public Health Committee held two called meetings and in addition canvassed its membership on two additional occasions by mail. In addition to the routine work of examining various films and pamphlets on tuberculosis and approving them before their distribution to the public, the committee collaborated with other agencies in the following activities:

1. In collaboration with the State Tuberculosis Board and the State Tuberculosis Sanatorium my Committee sought to promulgate through the WPA sufficient funds for the construction of a 200 bed Negro unit at the State Sanatorium.

2. In an advisory capacity, it functioned in collaboration with the Health Education director and the State Health Consultant of the National Youth Administration in developing plans for roentgen examination of the chests of all youths in the N.Y.A. program in Florida. Approximately 700 enrollees are affected by this program.

3. The Committee surveyed by mail and questionnaire all known nurses' training schools in general hospitals in the state to ascertain what, if any, protection was provided for the nursing staff and what efforts were made to discover tuberculosis among the student nurses and other hospital personnel. A summary of the findings was made and distributed to the Committee members, hospitals and training schools participating in the survey. Comments from participating institutions indicated that the survey developed a greater cognizance of the problem in numerous hospitals and that certain measures of study and protection are now being utilized for the protection of the students, graduate nurses and hospital personnel as the result of this survey.

4. Collaborating with the Division of Tuberculosis, State Board of Health and with the Selective Service Board, your Committee urged that all draftees rejected because of tuberculosis by the local draft boards or induction centers be reported to the proper authorities so that follow-up activities might be conducted both on the rejected draftees and on contacts. In counties where organized County Health Units are in operation, reference of these cases has been made to such authorities.

5. Collaborating with the State Sanatorium, the State Defense Council and the Florida Tuberculosis and Health Association, your Committee discussed the establishment of pneumothorax refill stations at strategic points throughout the state. This in a sense is a war measure and defense activity since it may make possible the evacuation of 150 ambulatory patients from the State Sanatorium in case such beds may be required for base hospital activity. Further efforts along this line are in progress.

6. The Tuberculosis and Public Health Committee is still working with the State Superintendent of Public Instruction and certain local groups and with component medical societies in an effort to develop some plan whereby local school boards may make the roentgen examination of the chests of school teaching personnel a mandatory requirement as part of the annual physical examination required for teachers' certificates. Thus far, the

results have not been encouraging but further effort will be made along this line since our Committee feels that it is extremely important to insist upon a school personnel free from active tuberculous disease.

Respectfully submitted,
M. Jay Flipse, *Chairman*.

"The Committee recommends that the report of the Advisory Committee to the Woman's Auxiliary be received and published." It was moved and seconded that this report be received and published. Motion prevailed.

REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

The Advisory Committee met with Mrs. W. J. Barge, president of the Auxiliary, and her board, on October 4, 1941, in St. Augustine. As a result of this meeting, the following charges were sent to each county auxiliary by our President, Dr. Walter Jones.

At a meeting with the board of the Woman's Auxiliary to the Florida Medical Association and the Advisory Committee, plans for the year in our state were discussed and the following charges were adopted. These were formulated after thoroughly taking into consideration the plans of the National Auxiliary, your President, Mrs. W. J. Barge, having attended the meeting in Cleveland in June, as well as the board meeting of the Woman's Auxiliary to the American Medical Association, of which she is a member as State President. Therefore, may I ask you to give careful consideration to the following twelve charges for this year.

1. Endeavor to have all your members subscribe to and read "The Bulletin," the official organ of the Woman's Auxiliary.
 2. Continue diligently to distribute the magazine Hygeia.
 3. Secure A. M. A. broadcasts over your local station and urge the schools of your county to permit the pupils to listen and make use of them in their science classes.
 4. Hold yourself in readiness to cooperate 100 per cent with the Legislative Committee.
 5. Hold a fifth annual Health Institute Day, or health programs as best suited to your locality.
 6. Cooperate with the Tuberculosis Association, particularly the Christmas Seal sale.
 7. Cooperate with the Cancer Field Army.
 8. Prepare an interesting exhibit for the State Medical meeting.
 9. Appoint a chairman to cooperate with the local defense committee.
 10. Stress organization chairman's duty this year. For further information, Mrs. R. L. Cline, 409 Morningside Drive, Lakeland, Florida, is state chairman this year.
 11. Urge attendance at district meetings.
 12. Appoint an active Archives chairman to prepare a biography of one or more prominent medical men in your community, either of the present or past to be filed yearly with Stewart Thompson, manager of The Florida Medical Association. This information from a historical standpoint will increase in value from year to year.
- Wishing you a successful year and assuring you of my cooperation, I am

Sincerely,
Walter C. Jones, Jr., M.D.
President Florida Medical Association.

It may be stated that the auxiliaries in each instance have cooperated wholeheartedly in the civilian defense efforts, and in some cases, and quite properly so, this work has taken precedence over some of the other work previously anticipated.

Respectfully submitted,
Gordon H. Ira, *Chairman*.

"The Committee recommends that the N.Y.A. report submitted by Dr. T. Z. Cason be referred to a committee composed of Drs. Cason, Shaler Richardson and Stewart Thompson for analysis, condensation and publication of those portions which may be of interest to the members of the Florida Medical Association."

It was moved and seconded that this report be received and referred to the above named committee. Motion prevailed.

REPORT OF REFERENCE COMMITTEE NO. 3

Dr. Shaler Richardson, chairman of Reference Committee No. 3, Finance and Administration, was recognized and asked to present the recommendations of that committee.

"The Committee recommends that the report of the Executive Committee be adopted and approved for publication."

The recommendations contained in the report of the Executive Committee were presented to the House of Delegates to be voted on separately.

Dr. Richardson read the recommendation of the Executive Committee to rescind the action of the House of Delegates in May 1932, providing for medicolegal aid to county medical societies. Motion to adopt the recommendation made and seconded.

DISCUSSION

Dr. Flipse: This is just another illustration of "letting George do it." This particular action was taken in 1932, and one of the chief beneficiaries has been Dade County.

It appears that our present Executive Committee is not favorably inclined to spend any of the Association's money toward the elimination of this evil. I personally feel that it is a good investment and that it is a mistake to rescind this particular action on the basis of "letting George do it." Unless these cases are brought to the attention of the law enforcement officers and proof furnished, these illegal practices are very frequently overlooked for years. We have obtained numerous convictions. Some jumped bail but disappeared from town as a result. All were very satisfactory conclusions to these cases, I think the money has been well spent.

It appears to be a fair arrangement and should be allowed to stand as it was before the rescinding amendment was proposed.

Dr. Herpel: I want to correct Dr. Flipse's impression that this is "letting George do it," and to justify the stand of the Executive Committee. There was no intention of letting Dade County down, only to substitute a duly constituted method of investigation by trained investigators employed by the State Board of Health with more authority than any local investigator for Dade County. The State Board of Health has a personnel of men trained especially for this kind of work. We propose to do what you have been doing with your funds with the use of the State Board of Health funds, by having these investigations made by trained investigators employed by the State Board of Health.

Dr. Owens: I also want to reassure Dr. Flipse and defend the Reference Committee. This matter was brought up yesterday with considerable discussion and clarification. I am sure that Dade County will not be allowed to suffer.

Dr. Peek: These men with the State Board of Health have been doing remarkable work in Florida. I have seen some of it in Tampa and Bradenton and I think that it is in the proper hands. I have been on the State Board of Medical Examiners for years. I have seen numerous prosecutions attempted. Each county tried it. Some were successful and some were not. I think that it is up to the State Board of Health to handle this investigation. I feel sure that they can do it and that it is the proper way.

Dr. Richardson: Until last December I was a member of the State Board of Health and I know the work that has been done in the last year. I think that Mr. Doss and his assistants have been very active in this work. Certainly I don't think that it is the duty of the Florida Medical Association to spend its funds for this purpose. It

is for the protection of the public and it should come out of public funds. We feel that this work can be better handled under the proposed setup and therefore recommend the rescinding of this particular action.

Dr. Peek: I feel that the license we pay to practice medicine is money that is paid out which goes to the state and county for our protection more than that which we pay to the Florida Medical Association. We all have to pay for City, State and County licenses to practice medicine. That fund is taken up and we do not derive any benefit from it unless we do get protection. And I think that if we demand it, we will get it.

Question called for and motion carried.

The recommendation by the Executive Committee to amend the By-Laws of the Association and rearrange the state into four medical districts and eight councilor districts was read by Dr. Richardson.

Motion made and seconded that all changes in the By-Laws recommended by the report of the Executive Committee be approved. Motion prevailed.

Motion made and seconded that the report of the Executive Committee as a whole be adopted and published. Motion prevailed.

REPORT OF EXECUTIVE COMMITTEE

Three official meetings of the Executive Committee were held during the fiscal year. The first was held in Jacksonville, April 30, 1941, following the adjournment of the Annual Convention.

A working budget for the fiscal year was presented by Dr. Richardson, the secretary, and, after various items were discussed, it was adopted.

An inquiry was received regarding the Metropolitan Casualty Insurance Company of New York. At the request of our Committee, Mr. Sam Marks, the Association's attorney, made an investigation and reported that the company had a high rating and was considered sound. This fact was recorded in the minutes as information to be transmitted to any member who might make inquiry.

On request of the Lake County Medical Society, Dr. Edward M. Coleman of Clermont was granted honorary membership. On request of the Madison-Suwannee County Medical Society, Dr. Eustace Long of Madison was granted honorary membership.

Your Executive Committee, after a careful study, decided that Association funds should not be given to county medical societies for ridding the state of unlicensed practitioners, but that the proper state officials should make prosecutions and defray the expenses. The Bureau of Narcotics of the State Board of Health, under which four inspectors operate in the state, has done a splendid job during the past year in securing evidence of violations and in stimulating action by county solicitors and other state officers. In response to an inquiry, a communication dated December 16, 1940, was received from Dr. Olin West, secretary of the American Medical Association, which reads in part:

In so far as I am informed, the Florida Medical Association is not empowered under the laws of the state to administer the medical practice act or other statutes that may have a bearing on the issuance of licenses or the enforcement of the provisions of the statutes. If that understanding is correct, it is my opinion that it is in no manner the duty of the Florida Medical Association to institute such proceedings as may be necessary to deal with violations of the state laws.

Your Committee, therefore, recommends the rescinding of the following, which appeared in the report of the Executive Committee and was adopted by the House of Delegates in May 1932 (*See pages 520 and 529 of May 1932 Journal*).

We recommend that the State Association give financial aid to County Societies in their efforts to rid the State of unlicensed practitioners in the following manner: That the State Association match dollar for dollar, cash deposited by component County Societies with the State Association's treasurer, this cash to be used for medico-legal activities in said counties. The total amount put up in any one year shall not exceed 50 per cent of the total State dues paid in by that Society during the year and in cash shall not exceed \$200.00 for any one year.

Each request for such financial aid shall be considered by the Executive Committee and no request shall be granted unless authorized by unanimous consent of the Executive Committee. Money received from any component society shall be set up in the State Association books, with a like amount of the Association's funds, to the credit of that County Society. This fund is to be under the jurisdiction of the Association's Executive Committee and no obligations are to be incurred against this fund without such obligations first being approved by the Executive Committee. Invoices of bills for such approved expenditures shall be filed with the business manager of the Association, covering items of authorized expenditures, and the Association's check shall be issued in payment thereof. No payment for expenditures can be made except by means of the State Association's check bearing the signature of the treasurer of the Association.

The second meeting was held June 27, 1941 in Jacksonville when the Medical Postgraduate Course was in session.

Communications were read from Dr. W. C. Roberts, secretary of the Bay County Medical Society, and Dr. W. M. Rowlett, secretary of the State Board of Medical Examiners, opposing House Bill No. 1386 which proposed to compel the State Board of Medical Examiners to issue a limited license for William T. Allen of Bay County to practice medicine. Your Committee went on record as approving and endorsing these two communications which definitely opposed the issuing of such a license.

Lists of names of physicians were submitted to Governor Holland by your Committee when appointments of a medical or public health nature were to be made.

A schedule of sessions for this annual convention was approved as printed in the program. The official dates for the convention were set for April 13, 14 and 15, 1942.

The third meeting was held on January 4, 1942 in Jacksonville, just prior to the pre-convention meeting.

A check for \$200.00 from Dr. W. L. Fitzgerald, treasurer of the Dade County Medical Society, was ordered matched with a like sum from the Association's funds and an amount of \$400.00 set up in the books for medicolegal investigations of the Dade County Medical Society.

The report of our delegates to the A.M.A., Dr. Edward Jelks and Dr. Meredith Mallory, was read and ordered published in the Journal.

The invitation of the Pinellas County Medical Society to hold the 1943 annual convention in St. Petersburg was approved, and your Committee recommends that the House of Delegates designate St. Petersburg as the convention city for 1943.

On recommendation of the Dade County Medical Society, Dr. W. Carlton Rentz, Jr., was elected an honorary member until he is able to return to practice.

Dr. Alfred G. Levin, chairman of the Association's Committee on Cancer Control, appeared before our committee and stated that a cancer booklet was being prepared with the help of specialists and that a man in Miami had agreed to defray the printing cost of the booklet, which would amount to about \$1,000.00. Your Committee recommended that the copy for the cancer booklet be compiled by the Association's Committee on Cancer Control, and that it be approved by the Association's Committee on Publication.

Mr. Francis P. Whitehair of the law firm of Hull, Landis & Whitehair of DeLand, was retained as one of our attorneys to handle any and all legal matters of our Association, that were entrusted to him during the calendar year, 1941. Mr. Whitehair and his associates rendered excellent service last year and were compensated according to agreement.

Your Executive Committee, through unanimous vote by wire, changed the meeting place of the Sixty-Ninth Annual Convention of the Association from Palm Beach to Hollywood. This action followed receipt of a telegram

on March 17, 1942, from Mr. I. N. Parrish of New York City, sales manager of the Southern Florida Hotels, which read in part:

I have just received from George McDonald, owner of hotels, following cable quote account national defense program, cannot hold Florida Medical at Palm Beach Biltmore.

For the purpose of (1) rearranging the state into four medical districts and eight councilor districts, (2) providing for a committeeman on each of our regular committees from each medical district and one committeeman at large, (3) providing for the appointment of one councilor in each of the eight councilor districts and one councilor at large, (4) including the last two living immediate past presidents on the Executive Committee, and (5) providing for a new regular committee on Conservation of Vision, the following amendments to the By-Laws are recommended:

That Chapter VI, Section 1 (paragraph 1) be amended to read: "The Council shall consist of one councilor at large, who shall serve as chairman, and one councilor from each of the following districts: Councilor District No. 1, comprising the following counties: Bay, Calhoun, Escambia, Franklin, Gult, Holmes, Jackson, Okaloosa, Santa Rosa, Walton and Washington. Councilor District No. 2, comprising the following counties: Baker, Columbia, Dixie, Gadsden, Hamilton, Jefferson, Lafayette, Leon, Liberty, Madison, Suwannee, Taylor and Wakulla. Councilor District No. 3, comprising the following counties: Alachua, Bradford, Clay, Duval, Flagler, Gilchrist, Levy, Marion, Nassau, Putnam, St. Johns and Union. Councilor District No. 4, comprising the following counties: Brevard, Lake, Orange, Osceola, Seminole, Sumter and Volusia. Councilor District No. 5, comprising the following counties: Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas and Sarasota. Councilor District No. 6, comprising the following counties: Charlotte, Collier, DeSoto, Glades, Hardee, Hendry, Highlands, Lee and Polk. Councilor District No. 7, comprising the following counties: Indian River, Martin, Okeechobee, Palm Beach and St. Lucie. Councilor District No. 8, comprising the following counties: Broward, Dade and Monroe."

That Chapter VI, Section 1 (paragraph 2) be amended to read: "Upon the adoption of this amendment, the incoming President shall appoint one councilor from each councilor district, four for one year (one from each medical district) and four for two years, and thereafter they shall be appointed for two years as the terms expire. The President shall also appoint each year one councilor at large for a term of one year, who shall automatically become the chairman of the Council."

That Chapter VII, Section 1 (paragraph 1) be amended by adding after the words, a Committee on Venereal Disease Control (Section 19), "a Committee on Conservation of Vision (Section 20)." That the numbers 20 and 21 be deleted and the numbers 21 and 22 be inserted in lieu thereof.

That Chapter VII, Section 1 (paragraph 2) be amended to read: "The State of Florida shall be divided into four medical districts, as follows: Northwest, Northeast, Southwest and Southeast Districts. The Northwest District (A) to include the following counties: Baker, Bay, Calhoun, Columbia, Dixie, Escambia, Franklin, Gadsden, Gulf, Hamilton, Holmes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Okaloosa, Santa Rosa, Suwannee, Taylor, Wakulla, Walton and Washington. The Northeast District (B) to include the following counties, Alachua, Bradford, Brevard, Clay, Duval, Flagler, Gilchrist, Lake, Levy, Marion, Nassau, Orange, Osceola, Putnam, St. Johns, Seminole, Sumter, Union and Volusia. The Southwest District (C) to include the following counties: Charlotte, Citrus, Collier, DeSoto, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk and Sarasota. The Southeast District (D) to include the following counties: Broward, Dade, Indian River, Martin, Monroe, Okeechobee, Palm Beach and St. Lucie."

That Chapter VII, Section 2 (paragraph 1) be amended to read: "The Executive Committee (or Board of Governors) shall consist of the President and Secretary, ex-officio, the last two living immediate past presidents and five members to be appointed by the President. Upon the adoption of this amendment, the President shall appoint four members, one from each of the four medical districts, one for one year, one for two years, one for three years and one for four years, and thereafter they shall be appointed for a term of four years as the terms expire. The President shall also appoint each year one member at large for a term of one year. Each immediate past president shall automatically become a member of this committee for a term of two years. The President shall select the chairman of this committee. It shall consider and act upon all matters of business pertaining to the Association in the interval between the annual meetings."

That Chapter VII, Sections 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 and 19 be amended by deleting the word "six" and inserting in lieu thereof the word "five" and by deleting the words: "The President shall appoint six members as designated above, two for one year, two for two years, and two for three years, and thereafter they shall be appointed for three years as the terms expire," and inserting in lieu thereof the words: "The President shall appoint four members, one from each medical district, one for one year, one for two years, one for three years and one for four years, and thereafter they shall be appointed for four years as the terms ex-

pire. The President shall also appoint each year one member at large for a term of one year."

That Chapter VII, Section 9 be amended by deleting the words: "confer with the officers of the . . . University of Florida and at the University of Florida at Gainesville."

That Chapter VII, Section 20 be amended to read: "The Committee on Conservation of Vision shall consist of five members who specialize in ophthalmology, to be appointed by the President. The President shall appoint four members, one from each of the four medical districts, one for one year, one for two years, one for three years and one for four years, and thereafter they shall be appointed for a term of four years as the terms expire. The President shall also appoint each year one member at large for a term of one year. The President shall select the chairman of this committee. The duties of this committee shall be such as usually fall upon such a committee."

That Section numbers 20, 21 and 22 of Chapter 7 be deleted, and that numbers 21, 22 and 23 be inserted in lieu thereof.

RECOMMENDATIONS

1. St. Petersburg as meeting place for 1943.
2. Rescind action concerning medicolegal aid to county societies.
3. Amendments to By-Laws.

Respectfully submitted,
Louie Limbaugh, *Chairman*.

"The Committee recommends that the report of the Committee on Medical Economics be adopted and approved for publication." Motion made and seconded that this report be adopted and published. Motion prevailed.

REPORT OF COMMITTEE ON MEDICAL ECONOMICS

Due to the absolute unsettled status not only of our own state economics condition, but the national as well, there has been no activity of our committee.

The numerous problems that have been in consideration for solution by this Committee have of necessity remained status quo. We do not see any change to take place in the near future, and we do not have any recommendations to make at this time.

We, therefore, move that this report be accepted.

Harrison A. Walker, *Chairman*.

"The Committee recommends that the report of the Committee on Interrelationship be adopted and approved for publication." Motion made and seconded that this report be adopted and published. Motion prevailed.

REPORT OF COMMITTEE ON INTERRELATIONSHIP

The Interrelationship Committee continues its cooperation with the Bureau of Professional Relations of the University of Florida School of Pharmacy. All of the Bureau publications now pass through the hands of at least one member of the Interrelationship Committee before publication.

In the laboratories of the University of Florida the Bureau of Professional Relations carries on a continual research program in an effort to investigate the possibilities of new prescription forms. The results are published in order (1) to reduce costs of medication, (2) to discourage self-medication, (3) to encourage use of prescriptions compounded from official drugs and chemicals.

Dr. John E. Maines of Gainesville represents the Interrelationship Committee in all conferences with the Bureau relative to research problems, the type of information most desired by the medical profession, and to check on the rationale of therapy mentioned by the Bureau in its review of medical literature. The Bureau to date has published over 35,000 pieces of literature.

Dr. P. A. Foote and Mr. C. R. Jordan, director and assistant director of the Bureau of Professional Relations,

have informed us that in recent months the Bureau has inaugurated several new services for the pharmacists, in order to bring them the new methods of compounding, new pricing concepts, the latest in pharmaceutical literature, and information intended to aid in creating better ethics in pharmacy.

Last year your efficient chairman of the Interrelationship Committee, Dr. E. C. Swift, reported that the Bureau of Relations, through its Associate Director, C. R. Jordan, had contacted over three hundred and fifty physicians and as many drug stores. This year the Bureau announces that since its inauguration it has contacted every major hospital, physician and pharmacist in the state.

The accepted Florida Formulary, compiled by the Bureau of Professional Relations, and approved by the Florida Medical Association, has not only been placed in the hands of most of the physicians of the state, but also in many of the wards of the larger hospitals of the state.

The Bureau has been cooperating, as far as financially possible, with various Florida units of the Army, Navy, and Air Corps in bringing to the medical officers the standards of therapy expressed in the Accepted Florida Formulary. Such cooperation has been solicited from the Bureau by the various hospital units of the Armed Forces.

The Bureau, through its directors, also reports that a selective survey was made in one of the larger cities of Florida to determine trends in prescribing habits. Within the last year, a notable trend was seen toward official drugs and chemicals.

Other states in the United States have Bureaus of Professional Relations, but through the outstanding work of Director Foote and Associate Director Jordan, the Florida Bureau of Professional Relations has gone forward at such an astounding rate, that instead of being a copy, it is fast becoming a model for other states.

Due to war conditions, the work of this Bureau becomes increasingly important. Your Committee on Interrelationship feels that closer cooperation with the Bureau is needed, and that definite financial assistance be considered by the Executive Committee.

Some states now have an interprofessional health council, composed of representatives from the medical, dental, pharmaceutical, hospital, and nursing associations. These councils are proving a success in bringing a closer understanding between all allied health professions. Your committee believes the Florida Medical Association should initiate and direct the formation of such a council.

Respectfully submitted,

H. J. Peavy, *Chairman*.

"The Committee recommends that the proposed change in By-Laws (*Chapter 7—section 1*) to include the State Tuberculosis Sanatorium as a State Institution contained in the report of the Committee on Medical Institutions be adopted, and that the report of this Committee be approved for publication."

It was moved and seconded that the above proposed change in By-Laws be adopted. Motion prevailed.

It was moved and seconded that the report of the Committee on Medical Institutions be adopted and published. Motion prevailed.

REPORT OF COMMITTEE ON STATE CONTROLLED

MEDICAL INSTITUTIONS

According to the By-Laws of the State Medical Association, Chapter 7, Section 1, "There shall be named a regular committee on State Controlled Medical Institutions, namely, the Florida State Hospital and Florida Farm Colony."

This section does not include the State Tuberculosis Sanatorium, and as Chairman of the Committee I would suggest that Section 1, Chapter 7, be amended to include the State Tuberculosis Sanatorium.

I regret that the Committee was unable at this time to visit personally the other Institutions. A questionnaire was forwarded to the superintendents of same and their response was all that could be asked for. Hence I give you the substance of the questionnaires:

THE FLORIDA FARM COLONY—GAINESVILLE

Dr. J. Maxey Dell, Superintendent.

Capacity 550, White only; Male 275, Female 275.

There is always a waiting list; at present it is 200.

This group of two hundred are now cared for in their homes or other places, and all should be institutionalized where they can be cared for far better and with less cost to relief and welfare agencies and also decrease the begetting of more feeble-minded and imbeciles, as this type will associate with their own kind.

Total admissions last year were only 34, and discharges 21, not including deaths. There were 10 deaths, with bronchopneumonia in the lead, and next as cause of death came lobar pneumonia, enterocolitis, pulmonary tuberculosis and status epilepticus.

Personnel: Regarding adequate personnel, an additional physician is needed; there are no graduate nurses, no technical personnel such as laboratory or x-ray technicians. The ratio of patients to employees—7.2 to 1. The ratio of doctors to patients—292 to 1. The nursing personnel contains no graduate nurses. There is not sufficient and proper space for the patients as regards hygiene, fire hazards, and medical and nursing care.

Emergency: There is now going on preparation of facilities for the proper protection and care of patients in case of enemy attack, this to include care of casualties that might result from attack.

Contagious Diseases: All admissions are vaccinated against smallpox and are given typhoid vaccine. Immunization against diphtheria and measles is not carried out routinely.

Roentgen Examination of Chest: It is important to find the early cases and isolate same, on all admissions and employees. The State Board of Health has recently made a roentgen study of the chests of all employees and a great percentage of patients, and the program will be continued. This is important not alone for the safety of patients but for the safety of employees.

Replying to a question as to what was the greatest need, Dr. Dell replied, "Adequate trained nursing personnel."

With what Dr. J. Maxey Dell has to work with, with the handicap he has, let us commend him for the good work he is doing, and let us lend the support of the Association in the form of cooperation and recommendation when he seeks again more and better buildings and a larger and better trained personnel for the care of those that the State of Florida assumes charge of.

THE FLORIDA STATE HOSPITAL—CHATTahoochee

J. H. Therrell, Superintendent.

Capacity: White 3,362; Male 1,556, Female 1,806. Colored 1,838; Male 960, Female 878.

There is always a waiting list, at this time 50. The patients now waiting are in homes, hospitals and unknown places. The admissions last year totalled 1,197; the discharges 841. Deaths 329; the principal causes of death not stated.

Personnel: The medical and nursing staff are not adequate. The technical staff is sufficient. The ratio of patients to employees—5 to 1.

There is one doctor to each 405 patients. The nursing staff has 1 nurse to each 212 patients, plus 377 trained attendants and 90 student nurses. The emergency has had definite effect on the personnel; there has been a turnover of 800 in the past year.

Relative to sufficient and proper space for patients, adequate medical care, hygiene, fire safeguards, the answer is NO.

In Case of Local Enemy Attack: All preparations have been made for complete blackout and sufficient emergency supplies stocked, such as bandages, and splints, to care for a minimum of 100 casualties.

Contagious Diseases: All patients committed and all employees are vaccinated against smallpox and inoculated against typhoid.

Roentgen Examination of Chest: All new admissions and all employees receive routine examination of the chest by x-ray.

The Greatest Medical Need: (1) Additional hospital space; (2) a larger medical staff of trained men, and (3) a larger nursing staff.

New Construction: During the past year a three story building was completed which houses the new Surgical Unit, X-ray, Ear, Eye, Nose and Throat Department and the personnel physician. Four new wards were completed. One wing of the infirmary was rebuilt to provide for 90 additional patients.

With the recent advances in psychiatry and neuropsychiatry let us hope and let us lend support to this hospital so that it will, in the future, have sufficient and trained medical and nursing personnel to care for, in an even better manner, those who are hospitalized there.

THE STATE TUBERCULOSIS SANATORIUM AT ORLANDO

This State Institution, which was opened in February 1938, has been filled to capacity. The capacity is 400—white 300, colored 100. No patient under age 16 is admitted unless he or she has the adult type of tuberculosis. Cases of bone and joint tuberculosis are not accepted. Each patient is admitted through his physician's report and the approval of the Board of Commissioners of the county in which he has legal residence. Only patients who have lived in the state continuously for one year or more are eligible. Last year 72.8 per cent of all admissions were far advanced cases, and 10 per cent were non-tuberculous. There has always been a waiting list.

Total admissions last year, 306; total discharges 238, of which 145 were apparently arrested. Deaths last year, 63, all having as direct cause of death, pulmonary tuberculosis.

Personnel: The Sanatorium does have adequate medical, surgical and nursing personnel, except that Dr. L. H. Kingsbury, one of the chest surgeons, was called into military service in February of this year. The technical staff is entirely adequate. The ratio of patients to employees is 2 to 1; the ratio of patients to doctors, 65 to 1; the ratio of patients to nurses, 7 to 1.

The emergency has and is working a hardship, particularly on the nursing side, and this becomes more threatening as time goes on. It has been necessary to increase salaries principally to offset the increased cost of living, as each employee begins at a basic salary.

The Sanatorium proper is one complete building, fire-proof, and is adequately equipped and appointed for the purpose for which it was intended.

In Case of Enemy Attack: Plans are reaching completion for the evacuation of 150 ambulatory patients, especially those on artificial pneumothorax, provided sufficient and properly operated Re-fill Stations can be maintained by physicians with some experience. These physicians are to receive remuneration from the counties where the patients reside or from the patient himself. With the evacuation of 150 patients, the Sanatorium can admit casualties and each member of the medical and nursing staff has been assigned to certain stations and duties.

Concerning Contagious Diseases: No form of immunization is used.

Roentgen Examination of Chest: Naturally all admissions receive roentgen examination of the chest. All employees receive this examination, and in four years 14 employees were found to have pulmonary tuberculosis when they came to the Sanatorium for their work. Each employee is re-examined every six months while in service.

The greatest need at the Sanatorium today is a 200 bed addition for white patients who are practically hopeless and infectious cases, as 56 such applications were re-

fused last year, also a 200 bed separate unit for Negro patients.

During the last year three new Staff homes have been constructed, so that members of the Staff may live on the grounds in order to serve better the medical needs of the Sanatorium.

CONCLUSION

There is hospitalized at present 6,150 residents of the State of Florida in our Medical Controlled Institutions. All three Institutions are strained beyond their limits each day in the year. These Institutions are necessary in order that those residents of the state who have a normal brain and healthy body may live with their families in surroundings and under proper conditions, so that there will be no menace from those who can and should be properly hospitalized. Too, there are many unfortunates who, by proper hospitalization and treatment can be improved and cured and returned to their counties as useful citizens again.

This Committee recommends that each member of the State Medical Association lend his support to the affairs and welfare of these State Institutions, so that Society may be better protected.

R. D. Thompson, *Chairman.*

"The Committee recommends that the report of Council be adopted and approved for publication."

It was moved and seconded that the report of Council be adopted and published. Motion prevailed.

REPORT OF COUNCIL

The By-Laws of the Association provide that I, as chairman of the Council, present an annual report on behalf of our twelve councilors. An individual report from each of the twelve councilor districts was called for at the pre-convention meeting held in Jacksonville, January 4. The annual reports prepared by our councilors and read at this pre-convention meeting were turned in and published in the February Journal.

Your Council arranged for an annual meeting in each of the six medical districts last fall. This was the fifth year that the Council undertook the responsibility of carrying on the activities in this connection.

The value of these district meetings cannot be too strongly stressed. Less formal than a larger group meeting, they give more opportunity for members to discuss problems confronting the medical profession, and permit a wider acquaintance among the members and officers. Since each meeting is arranged for a single afternoon, and no member is required to travel over one hundred miles, the time and expense of attendance are cut to a minimum.

There were 340 members who attended the six meetings. At the state convention in Jacksonville, 500 members were in attendance. By comparison this is certainly a creditable showing, since the district meetings occupied only one afternoon and the state meeting, two and one-half days. The Woman's Auxiliary has taken a definite interest in the district meetings and there were 157 ladies in attendance, as compared to 213 at the state meeting.

Nineteen scientific papers were presented at the district meetings. That these papers were of definite interest was evidenced by the prolonged discussions. It is believed that these fine district meetings and the sacrifice the state officers have made to attend them all, are a contributing factor in the strength, harmony and efficiency of the State Association.

Detailed writeups concerning the six medical district meetings appear in your November and December Journals.

Your Council heartily endorses the proposed change in the By-Laws to reduce the number of councilor districts from twelve to eight, and to provide for one councilor at large who shall serve as chairman. Some of the councilor districts are entirely too small at the present time. For in-

stance, in councilor district number five there are only two county medical societies; and in district ten there is only one society. It does not seem logical to have a councilor district composed of only one county medical society. It is our recommendation that the proposed change in the By-Laws, submitted by the Executive Committee, receive favorable action.

I wish to express deep appreciation for the splendid cooperation and efficient service of councilors W. C. Roberts, C. D. Whitaker, J. M. Price, A. T. Cobb, L. Y. Dyrenforth, Maximilian Stern, John R. Boling, H. V. Weems, Carl D. Hoffmann, E. B. Hardee and R. L. Elliston.

Respectfully submitted,

W. Duncan Owens, *Chairman*.

"The Committee recommends that the report of the Committee on Medical Preparedness be adopted and approved for publication."

It was moved and seconded that this report be adopted and published. Motion prevailed.

REPORT OF COMMITTEE ON MEDICAL PREPAREDNESS

During the year just ending the Medical Preparedness Committee of Florida has had prompt and efficient cooperation by the county committees. There have been very few changes in the personnel of physicians doing examining work for the local boards or those serving on the advisory boards.

Immediately after the President of the United States authorized the establishment of a Procurement and Assignment Service on October 30, 1941, the Director of the Office for Emergency Management appointed a chairman for a Florida committee. He was ordered to set up in Florida an organization of Procurement and Assignment of physicians, beginning with the formation of a State Committee. This State Committee requested the County Medical Societies to form Committees for Procurement and Assignment. With only rare exceptions the County Medical Societies delegated to the County Committees on Medical Preparedness the duties of Procurement and Assignment. So that now we have two organizations within the Florida Medical Association: the Medical Preparedness Committees and the Procurement and Assignment Committees, whose duties are concerned with: (1) the organizing of medical personnel of the State to the advantage of the military needs; (2) the aiding in the procuring of doctors for duty in the armed forces and, (3) the providing of adequate medical care for the civilian population.

Since the Procurement and Assignment Service was authorized less than six months ago its operations to date necessarily are far from perfect. However, practically all of the doctors who were assigned to active military duties this year have had their individual cases passed on by this Service. To date names of 166 doctors have been submitted to the State Committee. Of those reported upon by the Procurement and Assignment Committees of the Counties, 75 per cent have been declared available for the military services. According to the latest reports from the secretaries of the county medical societies, there are on active military duty 116 members of the Florida Medical Association.

It is apparent that the doctors in Florida are doing their part most generously in winning the war. Great numbers are serving in the armed forces, and those who still remain at home are not only busier with the sick in their communities, but also are devoting hours of their time to the various civilian defense activities.

At the direction of the President of the United States, the Federal Security Administrator ordered the Medical Director of Selective Service of each state to appoint doctors upon whom local boards could depend for the correcting of remedial disabilities which are preventing their assigning selectees to military duty. The Medical Director of Selective Service of Florida has begun making such a

list of doctors to do this work. He has conferred with the Medical Preparedness Committee in order not to appoint members to do the work who would be objectionable to the Florida Medical Association.

We recommend that the House of Delegates of the Florida Medical Association approve, for the duration of the war, an endeavor at government expense to correct in selectees remedial physical defects which prevent their being assigned to military service and pledge its cooperation in this method of increasing the Nation's military strength.

Your Medical Preparedness Committee appreciates the wonderful cooperation it has had in the past year and pledges you again energetic efforts to help in keeping the doctors organized to meet any call from the nation, be this military or civilian.

Edward Jelks, *Chairman*.

Dr. Jones: This concludes the work of the reference committees.

On motion duly made, seconded and carried, the meeting of the House of Delegates adjourned.

REGISTRATION

The total registration during the Sixty-Ninth Annual Meeting of the Florida Medical Association, held in Hollywood, April 13, 14 and 15, was 770; members, 434; visiting doctors, 59; allied groups 7; exhibitors, 96; Woman's Auxiliary, 175.

REGISTRATION LIST

OFFICERS

Walter C. Jones, President *Miami*
Gilbert S. Osincup, President-Elect *Orlando*
Luther W. Holloway, 1st Vice-President *Jacksonville*
F. K. Herpel, 2nd Vice-President *West Palm Beach*
Shaler Richardson, Secretary-Treasurer *Jacksonville*
Stewart G. Thompson, Managing Director *Jacksonville*

MEMBERS

Apopka: T. E. McBride. *Arcadia*: G. H. McSwain, J. A. Simmons. *Bartow*: J. G. Gilchrist, C. H. Murphy, W. F. Peacock. *Bay Pines*: Orville N. Nelson. *Belle Glade*: William J. Buck. *Boynton*: Nat. M. Weems. *Bradenton*: L. W. Blake. *Branford*: P. C. Farnell. *Camp Blanding*: Frederick Oetjen. *Canal Point*: Wilburn C. Young. *Century*: J. I. Turberville, J. S. Turberville. *Chattahoochee*: F. E. Daves, W. G. Miles, Edith E. Norman. *Clearwater*: J. Sudler Hood, M. A. Nickle. *Clermont*: John F. McGuire. *Cocoa*: T. C. Kenaston, Walter C. Page. *Coral Gables*: Warren W. Quillian, Hillard W. Willis. *Cross City*: J. M. Anderson. *Crystal River*: W. B. Moon. *Dade City*: W. Wardlaw Jones. *Daytona Beach*: J. R. Chandler, A. E. Drexel, George M. Green, H. Hausman, E. H. Lenholt, M. B. Seltzer, Ludo von Meysenbug.

DeLand: Hugh West. *Fernandina*: George Dame. *Foley*: W. J. Baker. *Ft. Lauderdale*: Robert Blessing, O. C. Brown, Russell B. Carson, A. B. Connor, Anna A. Darrow, Frank Denniston, L. B. Elliston, R. L. Elliston, M. A. Lovejoy, L. U. Lumpkin, Royal H. Mayhew, Richard A. Mills, H. J. Peavy, Claus A. Peterson, Leigh F. Robinson, C. H. Sory, Lawrence L. Stepp, R. H. Stovall. *Ft. Meade*: G. H. Carefoot. *Ft. Myers*: W. H. Grace, Warren A. Harrison, H. Quillian Jones. *Ft. Pierce*: M. D. Council, Steve Johnston, A. M. Sample, L. L. Whiddon. *Gainesville*: J. M. Dell, Jr., John E. Maines, Jr., D. T. Smith, W. C. Thomas, George C. Tillman. *Havana*: J. W. Sapp. *Hialeah*: L. H. O'Quinn. *Hollywood*: Robert H. Farringer, R. R. Harriss, Elbert McLauray, F. Leslie Snyder.

Jacksonville: Lynne E. Baker, J. A. Beals, J. L. Boone, C. W. Boyd, W. H. Brooks, Alan Brown, Hugh A. Carithers, Jr., T. Z. Cason, B. A. Chapman, L. Y. Dyrenforth, F. L. Fort, L. C. Gonzalez, O. E. Harrell, William G. Harris, W. Tracy Haverfield, G. R. Holden,

H. Foxworth Horne, F. K. Hurt, Gordon H. Ira, Edward Jelks, Crowell W. Johnston, Simon I. Kemp, W. Jerome Knauer, F. W. Krueger, Louie Limbaugh, J. G. Lyerly, W. H. McCullagh, Robert B. McIver, Martin Mangels, Jr., Kenneth A. Morris, J. N. Patterson, William H. Pickett, C. D. Rollins, William E. Ross, Clayton E. Royce, E. T. Sellers, W. McL. Shaw, E. H. Teeter, H. D. Van Schaick, F. J. Waas, J. Frank Wilson.

Key West: Thomas Butt, James B. Parramore. *Kissimmee:* Wilson Lancaster. *Lacoochee:* W. H. Walters. *Lake City:* L. J. Arnold, Jr., R. B. Harkness, W. S. Nichols. *Lakeland:* James R. Boulware, Jr., Donald S. Bryant, R. L. Cline, John M. Kibler, G. C. Overstreet, T. H. Roberts, Herman Watson. *Lake Wales:* R. E. Wilhoite. *Lake Worth:* Grace E. Papot. *Live Oak:* Irby H. Black. *Maitland:* Eugene L. Jewett. *Manatee:* Blake Lancaster. *Marianna:* D. A. McKinnon, W. R. Wandeck.

Miami: Lawrence Adler, Ralph F. Allen, James L. Anderson, L. L. Andrews, Samuel Aronovitz, L. A. Baker, H. A. Barge, W. J. Barge, Nelson M. Black, Andrew G. Brown, C. P. Bullard, Lewis Capland, Gail E. Chandler, John E. Dees, F. H. Dieterich, P. L. Dodge, L. W. Dowlen, C. E. Dunaway, J. G. DuPuis, Howard K. Edwards, Herbert Eichert, James O. Elam, Marshall Faver, W. L. Fitzgerald, R. M. Fleming, M. Jay Flipse, Roger Forastiere, Stanley Frehling, Elmo D. French, Tom R. Gammage, Francis W. Glenn, J. Raymond Graves, E. J. Hall, John E. Hall, Fuad Hanna, Karl B. Hanson, Robert M. Harris, Winston F. Harrison, Laura M. Hobbs, B. F. Hodsdon, L. A. Hodsdon, Jack Humphreys, Thomas W. Hutson, M. Kuckku, A. Kushner, Carlos P. Lamar, Alfred G. Levin, Samuel D. W. Light, George D. Lilly, George Lister, Y. C. Lott, J. H. Lucinian, R. O. Lyell, J. M. McClamroch, William W. McKibben, P. J. Manson, D. A. Marion, James H. Mendel, Claude G. Mentzer, R. K. Nuzum, Jr., R. M. Oliver, Thomas O. Otto, Bascom H. Palmer, Colquitt Pearson, Homer Pearson, Nelson T. Pearson, Rufus J. Pearson, Max Pepper, J. Randolph Perdue, C. L. Perry, Edgar Peters, Gerard Raap, Harold Rand, Jack O. W. Rash, Homer A. Reese, J. C. Richardson, H. B. Rogers, Wiley M. Sams, Ralph Sappenfield, Oden A. Schaeffer, E. Clay Shaw, Francis C. Skilling, Donald W. Smith, J. W. Snyder, Robert T. Spicer, Franz Stewart, Joseph S. Stewart, Richard F. Stover, J. I. Thorne, Henry L. Tippins, John P. Turk, F. A. Vogt, G. J. Walsh, P. H. Watters, Philip Weinstein, P. B. Welch, Kenneth Whitmer, M. C. Wilson, R. C. Woodard, Iva C. Youmans.

Miami Beach: Milton G. Bohrod, Herman Boughton, Robert N. Bowman, Markus B. Cirlin, Francis E. Denman, O. S. Dowlen, Lee Elgin, Ralph Gowdy, A. R. Hollender, Walter T. Hotchkiss, Emil M. Isberg, Paul K. Jenkins, Allan Jones, M. A. Kugel, Frederick LeDrew, George N. Leonard, Louis G. Lytton, C. S. McLemore, M. B. Marks, Eugene B. Maxwell, Robert A. Mayer, David A. Nathan, W. Duncan Owens, Cayetano Panettiere, Frazier J. Payton, Julius R. Pearson, Jean Jones Perdue, Virgil H. Pieck, J. A. Renwick, R. E. Repass, John R. Richardson, Alexander Robbins, C. F. Roche, Maurice J. Rose, Edward Roth, Harold A. Ryan, Harry Z. Silverman, Donald G. Stannus, Guy R. Stoddard, E. J. Thomas, Rene A. Torrado, M. P. Travers, Harrison A. Walker, D. Ward White, M. Wigdor, G. H. Withers.

Miami Springs: Estella G. Norman. *Milton:* J. B. Turner. *New Smyrna Beach:* W. C. Chowning, Harry Z. Silsby. *Ocala:* R. D. Ferguson, J. N. Moore, Eugene G. Peek. *Orlando:* J. R. Chappell, Frank D. Gray, H. C. Ingram, Hewitt Johnston, Palmer Kundert, C. J. Larsen, Duncan McEwan, Meredith Mallory, Fred Mathers, W. S. Mitchell, P. L. Moon, Louis M. Orr, Joseph G. Seltzer, W. H. Spiers, B. E. Taylor, R. D. Thompson, Richard Walker, Jr., Walter A. Weed. *Pahokee:* Charles E. Creel. *Palatka:* Allen P. Gurganious, C. M. Knight. *Palm Beach:* Hobart E. Warren, Harry Moses, S. Richard Ombres, B. B. Sory. *Pensacola:* Herbert L. Bryans, M. W. Dodson, J. H. Fellows, J. M. Hoffman, M. A. Lischkoff, J. N. McLane, W. S. Randall, R. P. Stritzinger, Herbert W. Virgin, Jr., C. C. Webb, ,

Plant City: J. W. Alsobrook, J. A. Coleman. *Pompano:* Burton T. Gordon, George S. McClellan. *Quincy:* Julius C. Davis. *St. Augustine:* Reddin Britt, Charles C. Grace, R. D. Harris, V. A. Lockwood, Walter D. Webb, Herbert E. White. *St. Petersburg:* Arnold S. Anderson, James A. Bradley, William M. Davis, Annette M. Feaster, O. O. Feaster, L. M. Gable, John A. Herring, W. C. McConnell, Alvin L. Mills, Daniel F. H. Murphey, Ralph D. Murphy, R. Wynn S. Owen, C. C. Rudolph. *Sanford:* G. H. Putnam. *Sarasota:* John M. Butcher, John J. Jares. *Sebring:* L. W. Martin, H. V. Weems. *Stuart:* J. D. Parker. *Tallahassee:* L. L. Dozier, Lucille J. Marsh, Henry E. Palmer, J. H. Pound, B. A. Wilkinson.

Tampa: William P. Adamson, C. A. Andrews, A. M. Bidwell, W. C. Blake, John R. Boling, Leland F. Carlton, H. G. Cole, George L. Cook, J. C. Dickinson, R. R. Duke, W. P. Duncan, R. A. Ely, James L. Estes, S. B. Forbes, Eugene S. Gilmer, Charles M. Gray, L. W. Hewitt, Henry J. Jensen, A. R. Knauf, B. W. Lowry, Herbert R. Mills, David R. Murphey, Jr., Harold G. Nix, William M. Rowlett, C. A. Rudisill, H. Mason Smith, Joseph W. Taylor, J. C. Vinson, H. E. Whitaker. *Tyndall Field:* Nathan S. Rubin. *Vero Beach:* E. B. Hardee, Joseph B. Kollar, J. C. Robertson.

West Palm Beach: Wilbur O. Arnold, R. Henry Baldwin, W. E. Bippus, W. M. Blair, James L. Carlisle, R. O. Cooley, Thomas E. Daly, George M. Dawson, S. W. Fleming, W. H. Gardner, W. W. George, O. B. Hazen, V. M. Johnson, O. L. Kelley, Gaylord Lewis, David W. Martin, K. E. Montgomery, Lloyd J. Netto, J. A. Newnham, J. C. Nowling, J. H. Pittman, L. M. Rozier, W. Y. Sayad, C. W. Shackelford, Michael Smith, J. R. Sory, Edgar W. Stephens, V. D. Stone, W. E. Van Landingham, H. A. Wakefield, W. H. Weems, F. S. Whitman, W. C. Williams, Jr. *Williston:* J. W. McMurray. *Winter Park:* Ruth S. Hart.

VISITING DOCTORS

Clewiston: T. S. Gowin. *Ft. Lauderdale:* Richard J. R. Caines, Otto W. Schwalb. *Hollywood:* Jack Mickley, G. F. Zimmerman. *Jacksonville:* H. W. Coleman, R. C. Hood, Alexander I. Kernish, Wilson T. Sowder. *Key West:* George Ferre. *Lake Worth:* Robert O. Brockway, G. R. Wycoff. *Miami:* T. E. Cato, E. R. Crossley, W. W. Davies, Guy Fish, Randall B. Haas, George W. Lawson, M. B. Menke, Herman K. Moore, H. E. Parnell, Joseph W. Platin, Philipp Rezek. *Miami Beach:* Robert C. Dunn, Morris J. Levine, Dan C. Ogle, A. Lester Stepler. *Orlando:* R. W. Rosenquist.

Alabama—Dothan: John T. Ellis. *Arkansas—Pine Bluff:* Virgil L. Payne. *District of Columbia—Washington:* W. L. Mond, Earl R. Templeton. *Georgia—Atlanta:* Mark S. Dougherty, Jr., Daniel C. Elkin. *Augusta:* Everett S. Sanderson. *Moultrie:* James R. Paulk. *Savannah:* C. F. Holton. *Waycross:* W. F. Reavis. *Illinois—Chicago:* James Callahan, Robert Hawkins. *Indiana—Hammond:* Hugh A. Kuhn. *Kentucky—Middlesboro:* C. K. Brosheer. *Massachusetts—Boston:* Allen Greenwood. *Michigan—Lansing:* W. C. Behen. *New Jersey—Plainfield:* Grace M. Robertson. *New York—Brooklyn:* Edmund Marino. *New York City:* Alexandre Bruno, Albert C. Herring, I. S. Klemes. *Utica:* Frederick M. Miller. *Ohio—Akron:* R. A. Breckenridge. *Columbus:* John H. Mitchell. *Dayton:* H. C. Mundhenk. *Lakewood:* Elmore R. Bailey. *Virginia—Portsmouth:* Joseph D. Collins. *West Virginia—Wheeling:* W. P. Sammons. *Cuba—Havana:* Felix Hurtado, Angel Vieta.

ALLIED GROUPS

Chattahoochee: O. D. Fowler, Ph.D., Mr. R. E. Morgan. *Jacksonville:* Lloyd N. Harlow, D.D.S. *Miami:* Dr. Adele Hampton. *St. Petersburg:* Mr. E. M. Berryman. *Tampa:* Mr. William Parr. *Alabama—Birmingham:* Mr C. P. Loranz.

EXHIBITORS

Adams, Hugh I., Surgical Supply Co. *Orlando*
 Anderson, C. N., Westinghouse X-Ray Div. *Tampa*
 Anderson, T. E., Surgical Supply Co. *Tampa*
 Arrington, F. R., Gen. Elec. X-Ray Corp. *Jacksonville*
 Avery, W. E., C. B. Fleet Co. *Dacula, Ga.*
 Bassett, A. T., Eli Lilly & Co. *Jacksonville*
 Barthe, H. E., Cameron Surg. Specialty Co., *Rochelle, Ga.*
 Bell, Lloyd B., Borden Company *Miami Beach*
 Benjamine, Mrs. F. L., Dade Co. Blood Bank. *Miami*
 Breathitt, H. W., DePuy Mfg. Co. *Warsaw, Ind.*
 Brown, Harry, Tablerock Laboratories *Jacksonville*
 Budd, Joe, American Optical Co. *Miami*
 Bunton, Paul B., American Optical Co. *Atlanta, Ga.*
 Burnham, H. J., Eli Lilly & Co. *West Palm Beach*
 Butzer, G. I., Everhart Surg. Sup. Co. *Orlando*
 Byrd, Dick, Surgical Supply Co. *Miami*
 Campbell, Allan, Surgical Supply Co. *Orlando*
 Carter, J. M., Petrogalar Laboratories. *Tampa*
 Casey, Allen M., Wm. S. Merrell Co. *Tampa*
 Clarke, A. G., Camel Cigarettes *New York, N. Y.*
 Cleary, A. J., Dade Co. Blood Bank *Miami*
 Collins, R. F., Jr., Parke, Davis & Co. *Miami*
 Cooper, Frank E., Jr., Surgical Supply Co. *Miami*
 Cox, W. Oliver, Jr., Surgical Supply Co. *Jacksonville*
 Davis, W. P., Southeastern Optical Co. *Tampa*
 Dickinson, F. L., John Wyeth & Brother *Tampa*
 Dozier, Nicholas, Endo Products, Inc. *Orlando*
 Duncan, A. F., Pet Milk Co. *Tampa*
 Duncan, J. S., Pet Milk Co. *Orlando*
 Erikson, E. W., Amer. Hosp. Sup. Corp. *Chicago, Ill.*
 Fisher, George L., Southeastern Optical Co. *Jacksonville*
 Fremd, Fred, Philip Morris & Co. *New York, N. Y.*
 Friedmann, W. J., S. H. Camp & Co. *Daytona Beach*
 Gowder, P. M., Sharp & Dohme *Atlanta, Ga.*
 Graham, Douglas, E. R. Squibb & Sons *Atlanta, Ga.*
 Grossman, Ben, Westinghouse X-Ray Div. *Miami*
 Hathaway, J. C., John Wyeth & Brother. *Miami*
 Heether, Hans B., Keleket X-Ray Co. *Miami*
 Hines, Ralph C., Picker X-Ray Corp. *Miami*
 Hirsch, E. S., Southeastern Optical Co. *Miami*
 Horton, H. E., Gen. Elec. X-Ray Corp. *Tampa*
 Hunter, Joseph W., Walker Vitamin Prod. *Miami*
 James, F. P., Amer. Exhibition Co. *Birmingham, Ala.*
 Jones, Josephine, Bard-Parker Co. *Danbury, Conn.*
 Jongedyk, P., General Elec. X-Ray Corp. *Miami*
 Keith, D. R., A. S. Aloe Co. *Jacksonville*
 Keller, Robert D., Southeastern Opt. *Rochester, N. Y.*
 Kellerman, H., C. V. Mosby Co. *Tampa*
 Kennerly, W. D., Tablerock Labs. *Greenville, S. C.*
 Kiser, R. L., Eli Lilly & Co. *Miami*
 Kneedy, C. E., Keleket X-Ray Co. *Jacksonville*
 Knight, Zeke, E. R. Squibb & Sons *Coral Gables*
 Lamons, W. P., Westinghouse X-Ray Div., *N. Orleans, La.*
 Lavelle, R. J., Dade Co. Blood Bank. *Miami*
 Leonard, H. H., Endo Products, Inc. *Atlanta, Ga.*
 Lester, O. D., Lederle Laboratories. *Tampa*
 Lindeblad, Don, Amer. Hosp. Sup. Corp., *St. Petersburg*
 Lindley, J. E., E. R. Squibb & Sons. *Coral Gables*
 Lineberger, A. G., Wm. S. Merrell Co. *Valdosta, Ga.*
 McClune, W. B., Holland-Rantos Co. *Birmingham, Ala.*
 Macgrath, Miss Mae, S. H. Camp & Co. *Daytona Beach*
 McLean, R. S., Sch. of Phar., U. of Fla. *Hollywood*
 McPhaul, W. A., Jr., Surgical Supply Co. *Jacksonville*
 Martin, Albert E., John Wyeth & Brother, *Atlanta, Ga.*
 Merrihew, Jim, Jones Metabolism Equip. Co. *Miami*
 Mitchell, E. A., Endo Products, Inc. *Bradenton Beach*
 Moore, Charles B., Bard-Parker Co. *Danbury, Conn.*
 Morsbach, L. F., Smith, Kline & French Labs., *Phila., Pa.*
 Nelson, A. C., Picker X-Ray Corp. *Miami*
 Nicholson, H. B., American Optical Co. *Miami*
 O'Connell, Edna, Dade Co. Blood Bank. *Miami*

Parker, H. W., Sharp & Dohme. *Jacksonville*
 Parramore, Henry L., Surgical Supply Co. *Jacksonville*
 Pearson, Paul, Pet Milk Co. *Miami*
 Perkins, S. L., John Wyeth & Brother. *Philadelphia, Pa.*
 Quilligan, J. J., M & R Dietetic Lab. *Columbus, Ohio*
 Rader, E. E., M & R Dietetic Lab. *Atlanta, Ga.*
 Regan, F. A., Parke, Davis & Co. *Tampa*
 Roberts, R. E., Camel Cigarettes *Merrifield, Va.*
 Sample, D. H., Keleket X-Ray Co. *Tampa*

Schaeffler, T. E., Equitable Life Assur. Society. *Miami*
 Shetterly, E. C., Lederle Laboratories. *Jacksonville*
 Skillson, Mrs. Jane C., Dade Co. Blood Bank, *Miami Bch.*
 Smith, Helen, Philip Morris & Co. *Hollywood*
 Spahn, Phil J., Pet Milk Co. *Jacksonville*
 Spence, Evelyn, Dade Co. Blood Bank. *Miami*
 Spitze, Harold, Gen. Elec. X-Ray Corp. *Atlanta, Ga.*
 Swanson, Charles, Pet Milk Co. *St. Louis, Mo.*

Thompson, Byron, Surgical Supply Co. *Jacksonville*
 Vaughan, A. A., A. S. Aloe Co. *Winter Haven*
 Walker, D. W., Everhart Surgical Sup. Co. *Atlanta, Ga.*
 Walker, M., Walker Vitamin Prod., *New Rochelle, N. Y.*
 Weaver, M. H., American Optical Co. *Jacksonville*
 White, W. H. W., Mead Johnson & Co. *Jacksonville*
 Williams, J. B., Surgical Supply Co. *Miami*
 Williams, L. V., J. B. Lippincott Co. *Philadelphia, Pa.*

WOMAN'S AUXILIARY

Apopka: Mrs. T. E. McBride. *Arcadia:* Mrs. G. H. McSwain, Mrs. John A. Simmons. *Bartow:* Mrs. C. H. Murphy, Mrs. W. F. Peacock. *Belle Glade:* Mrs. Wm. J. Buck. *Boynnton:* Mrs. Nat. M. Weems. *Bradenton:* Mrs. L. W. Blake. *Clearwater:* Mrs. Sudler Hood, Mrs. M. A. Nickle. *Clermont:* Mrs. John F. McGuire. *Cocoa:* Mrs. T. C. Kenaston. *Coral Gables:* Mrs. J. L. Anderson, Mrs. L. Washington Dowlen. *Dade City:* Mrs. Wardlaw Jones. *Daytona Beach:* Mrs. George M. Green, Mrs. E. H. Lenholt, Mrs. M. B. Seltzer, Mrs. Ludo von Meyenburg. *DeLand:* Mrs. Hugh West. *Ft. Lauderdale:* Mrs. Richard Caines, Mrs. Russell B. Carson, Mrs. A. B. Connor, Mrs. Elliott M. Hendricks, Mrs. John Allen Johnston, Mrs. M. A. Lovejoy, Mrs. Richard A. Mills, Mrs. Claus Peterson, Mrs. Leigh F. Robinson, Mrs. R. H. Stovall. *Ft. Myers:* Mrs. W. H. Grace. *Gainesville:* Mrs. J. M. Dell, Jr., Mrs. John E. Maines, Jr., Mrs. George C. Tillman.

Hialeah: Mrs. L. H. O'Quinn. *Hollywood:* Mary W. Herndon, Mrs. Jack Mickley, Clarice Vaardahl. *Jacksonville:* Mrs. John A. Beals, Mrs. S. M. Copeland, Mrs. Lucien Y. Dyrenforth, Mrs. L. W. Holloway, Mrs. R. C. Hood, Mrs. H. Foxworth Horne, Mrs. Gordon H. Ira, Mrs. Edward Jelks, Mrs. C. W. Johnston, Mrs. W. Jerome Knauer, Mrs. F. W. Krueger, Mrs. W. H. McCullagh, Mrs. Robert B. McIver, Mrs. Martin Mangels, Jr., Mrs. Kenneth Morris, Mrs. Frederick Oetjen, Mrs. Clayton E. Royce, Mrs. H. D. Van Schaick, Mrs. J. F. Wilson. *Key West:* Mrs. Thomas Butt, Mrs. J. B. Parramore. *Lakeland:* Mrs. James R. Boulware, Jr. *Lake Wales:* Mrs. R. E. Wilhoite. *Lake Worth:* Mrs. Frank Bryan. *Live Oak:* Mrs. Irby Black.

Miami: Mrs. H. A. Barge, Mrs. W. J. Barge, Mrs. Nelson M. Black, Mrs. Andrew G. Brown, Mrs. E. R. Crossley, Mrs. Carl E. Dunaway, Mrs. Herbert Eichert, Mrs. M. J. Flipsey, Mrs. Walter C. Jones, Jr., Mrs. Paul Kells, Mrs. M. E. Kuckku, Mrs. Celia P. Lamar, Mrs. H. A. Leavitt, Mrs. Robert O. Lyell, Mrs. J. M. McClamroch, Mrs. P. J. Manson, Mrs. D. A. Marion, Mrs. C. Russell Morgan, Mrs. R. M. Oliver, Mrs. Max Pepper, Mrs. Gerard Raap, Mrs. Homer A. Reese, Mrs. Donald W. Smith, Mrs. Joseph S. Stewart, Ruth Stewart, Mrs. K. C. Thomas, Mrs. F. A. Vogt. *Miami Beach:* Mrs. M. B. Cirilin, Mrs. Otto Dowlen, Sylvia Fishlove, Mrs. R. B. Haas, Mrs. Morris J. Levine, Mrs. David Nathan, Mrs. W. Duncan Owens, Mrs. Julius R. Pearson, Mrs. Harold Rand, Mrs. R. E. Repass, Mrs. M. J. Rose, Mrs. Harrison A. Walker.

Arkansas—Pine Bluff: Mrs. Virgil L. Payne. *Illinois—Chicago:* Mrs. James Callahan, Mrs. Robert Hawkins. *Indiana—Indianapolis:* Mrs. Edmund D. Clark. *Maryland—Baltimore:* Mrs. F. B. Whitworth. *Michigan—Lansing:* Mrs. William C. Behen. *New York—New York:* Mrs. A. C. Herring, Helen Marks. *West Virginia—Wheeling:* Mrs. W. P. Sammons.

FLORIDA MEDICAL ASSOCIATION

A—NORTHWEST MEDICAL

1—Councilor *2—Councilor*

BAY
CALHOUN
ESCAMBIA
FRANKLIN
GULF
HOLMES
JACKSON
OKALOOSA
SANTA ROSA
WALTON
WASHINGTON

BAKER
COLUMBIA
DIXIE
GADSDEN
HAMILTON
JEFFERSON
LAFAYETTE
LEON
LIBERTY
MADISON
SUWANNEE
TAYLOR
WAKULLA

B—NORTHEAST MEDICAL

3—Councilor *4—Councilor*

ALACHUA
BRADFORD
CLAY
DUVAL
FLAGLER
GILCHRIST
LEVY
MARION
NASSAU
PUTNAM
ST. JOHNS
UNION
VOLUNIA

BREVARD
OSCEOLA
SEMINOLE
SUMTER

C—SOUTHWEST MEDICAL

5—Councilor *6—Councilor*

CITRUS
HERNANDO
HILLSBOROUGH
MANATEE
PASCO
PINELLAS
SARASOTA

CHARLOTTE
COLLIER
DESOTO
GLADES
HARDEE
HENDRY
HIGHLANDS
LEE
POLK

D—SOUTHEAST MEDICAL

7—Councilor *8—Councilor*

INDIAN RIVER
MARTIN
OKEECHOBEE
PALM BEACH
ST. LUCIE

BROWARD
DADE
MONROE
PALM BEACH
ST. LUCIE

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

GILBERT S. OSINCUP, M.D., President.....Orlando
EUGENE G. PEEK, M.D., President-Elect.....Ocala
L. W. BLAKE, M.D., 1st Vice Pres.....Bradenton
LOYD J. NETTO, M.D., 2nd Vice Pres.....W. Palm Beach
H. A. WALKER, M.D., 3rd Vice Pres.....Miami Beach
SHALER RICHARDSON, M.D., Sec'y-Treas.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D. P. II.....Jacksonville

BOARD OF GOVERNORS

J. ROCHER CHAPPELL, M.D., Chm...AL-43.....Orlando
JOHN R. BOLING, M.D...C-46.....Tampa
FREDERICK K. HERPEL, M.D...D-43.....W. Palm Beach
LOUIE M. LIMBAUGH, M.D...B-44.....Jacksonville
WALTER C. PAYNE, M.D...A-45.....Pensacola
J. SAM TURBERVILLE, M.D...PP-43.....Century
WALTER C. JONES, M.D...PP-44.....Miami
GILBERT S. OSINCUP, M.D (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville
STEWART G. THOMPSON, D. P. II. (Advisory) Jacksonville

SCIENTIFIC WORK

HERBERT E. WHITE, M.D., Chm...B-43.....St. Augustine
CHARLES J. COLLINS, M.D...AL-43.....Orlando
DOUGLAS D. MARTIN, M.D...C-46.....Tampa
HOMER L. PEARSON, M.D...D-45.....Miami
JAMES H. POUND, M.D...A-44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAIK, M.D., Chm...AL-43 Jacksonville
HORACE A. DAY, M.D...B-45.....Orlando
WHITMAN C. MCCONNELL, M.D...C-46.....St. Petersburg
HENRY E. PALMER, M.D...A-44.....Tallahassee
JOSEPH S. STEWART, M.D...D-43.....Miami
GILBERT S. OSINCUP, M.D. (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

JOHN S. HELMS, M.D., Chm...C-46.....Tampa
ROBERT D. FERGUSON, M.D...B-43.....Ocala
JESSE N. McLANE, M.D...A-44.....Pensacola
CAYETANO PANETTIERE, M.D...D-45.....Miami Beach
WALTER A. WEED, M.D...AL-43.....Orlando

PUBLIC RELATIONS

LEIGH F. ROBINSON, M.D., Chm...AL-43...Ft. Lauderdale
SIDNEY G. KENNEDY, M.D...A-43.....Pensacola
BAILEY B. SORY, M.D...D-44.....Palm Beach
JAMES L. STRANGE, M.D...B-46.....McIntosh
HARPER E. WHITAKER, M.D...C-45.....Tampa

NECROLOGY

GERRY R. HOLDEN, M.D., Chm...B-46.....Jacksonville
AUGUSTUS E. CONTER, M.D...A-43.....Apalachicola
GEORGE R. CREEKMORE, M.D...C-44.....Brooksville
JULIAN L. HARGROVE, M.D...AL-43.....Bartow
GERARD RAAP, M.D...D-45.....Miami

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm...B-46.....Jacksonville
W. WELLINGTON GEORGE, M.D...D-44.....W. Palm Beach
FRANK D. GRAY, M.D...AL-43.....Orlando
ROBERT B. HARKNESS, M.D...A-43.....Lake City
DAVID R. MURPHY, M.D...C-45.....Tampa

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chm...D-45.....Miami
JAMES M. HOFFMAN, M.D...A-46.....Pensacola
HEWITT JOHNSTON, M.D...B-44.....Orlando
JOHN N. MOORE, M.D...AL-43.....Ocala
R. WYNN S. OWEN, M.D...C-43.....St. Petersburg

MEDICAL ECONOMICS

HARRISON A. WALKER, M.D., Chm...D-45 Miami Beach
HERBERT L. BRYANS, M.D...AL-43.....Pensacola
FRANCIS T. HOLLAND, M.D...A-43.....Tallahassee
EDWARD JELKS, M.D...B-44.....Jacksonville
JOSEPH W. TAYLOR, M.D...C-46.....Tampa

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm...B-43.....Jacksonville
ELMO D. FRENCH, M.D...D-45.....Miami
LEO C. GONZALEZ, M.D...AL-43.....Tampa
ALVIN L. MILLS, M.D...C-46.....St. Petersburg
JOE I. TURBERVILLE, M.D...A-44.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm...D-45...Ft. Lauderdale
WILLIAM M. DAVIS, M.D...C-46.....St. Petersburg
DANIEL A. MCKINNON, M.D...AL-43.....Marianna
JOHN E. MAINES, JR., M.D...B-44.....Gainesville
RUFUS THAMES, M.D...A-43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

WILLIAM C. BLAKE, M.D., Chm...C-46.....Tampa
EARLSWORTH C. BRUNNER, M.D...D-45.....Miami
J. MAXEY DELL, JR., M.D...B-44.....Gainesville
DUNCAN T. McEWAN, M.D...AL-43.....Orlando
ROBERT G. NOBLES, M.D...A-43.....Pensacola

STATE CONTROLLED MEDICAL INSTITUTIONS

II. MASON SMITH, M.D., Chm...C-46.....Tampa
BENJAMIN F. BARNES, M.D...AL-43.....Chattahoochee
HARRY S. HOWELL, M.D...A-43.....Lake City
ROBERT T. SPICER, M.D...D-44.....Miami
ROLLIN D. THOMPSON, M.D...B-45.....Orlando

MATERNAL WELFARE

SAMUEL R. NORRIS, M.D., Chm...AL-43...Jacksonville
LAURIE L. DOZIER, M.D...A-45.....Tallahassee
ISAAC M. IIAY, M.D...B-43.....Melbourne
RALPH W. JACK, M.D...D-46.....Miami
W. WARDELOW JONES, M.D...C-44.....Dade City

CHILD HEALTH

GEORGE L. COOK, M.D., Chm...AL-43.....Tampa
THOMAS M. PALMER, M.D...B-44.....Jacksonville
WARREN W. QUILLIAN, M.D...D-45.....Coral Gables
COUNCELL C. RUDOLPH, M.D...C-46.....St. Petersburg
ALVYN W. WHITE, M.D...A-43.....Pensacola

CONSERVATION OF VISION

SHALER RICHARDSON, M.D., Chm...B-46.....Jacksonville
CARL E. DUNAWAY, M.D...D-44.....Miami
SHERMAN B. FORBES, M.D...C-45.....Tampa
HOLLIS C. INGRAM, M.D...AL-43.....Orlando
WILLIAM S. NICHOLS, M.D...A-43.....Lake City

ADVISORY TO WOMAN'S AUXILIARY

GEORGE C. TILLMAN, M.D., Chm...B-46...Gainesville
LUTHER C. FISHER, M.D...A-43.....Pensacola
JOHN D. HAGOOD, M.D...C-44.....Clearwater
LAWRENCE C. INGRAM, M.D...AL-43.....Orlando
ARTHUR L. WALTERS, M.D...D-45.....Miami Beach

REPRESENTATIVES TO INDUSTRIAL COUNCIL

RICHARD H. WALKER, M.D., Chm...B-44.....Orlando
THOMAS H. BATES, M.D...AL-43.....Lake City
JULIUS C. DAVIS, M.D...A-43.....Quincy
R. RENFRO DUKE, M.D...C-45.....Tampa
FERDINAND A. VOGT, M.D...D-46.....Miami

COUNCILOR DISTRICTS AND COUNCILORS

W. DUNCAN OWENS, M.D., Chm...AL-43...Miami Beach
First—COURTLAND D. WHITAKER, M.D...1-43 Marianna
Second—WILLIAM D. ROGERS, M.D...2-44 Chattahoochee
Third—LUCIEN Y. DYRENFORTH, M.D...3-43 Jacksonville
Fourth—MEREDITH MALLORY, M.D...4-44 Orlando
Fifth—LELAND F. CARLTON, M.D...5-44 Tampa
Sixth—S. EDGAR WATSON, M.D...6-43 Lakeland
Seventh—LLOYD J. NETTO, M.D...7-43 West Palm Beach
Eighth—ELBERT McLAURY, M.D...8-44 Hollywood

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
GILBERT S. OSINCUP, M.D.....Orlando
SHALER RICHARDSON, M.D.....Jacksonville

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate.....West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM P. ADAMSON, M.D., Chairman, 1920... Tampa
J. SAM TURBERVILLE, M.D., Secretary, 1940...Century
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902...Pensacola
HENRY E. PALMER, M.D., 1909...Tallahassee
ROBERT H. MCGINNIS, M.D., 1915...Jacksonville
FREDERICK J. WALTER, M.D., 1918...San Diego, Calif.
WILLIAM E. ROSS, M.D., 1919...Jacksonville
H. MARSHALL TAYLOR, M.D., 1923...Jacksonville
JOHN C. VINSON, M.D., 1924...Tampa
JOHN S. McEWAN, M.D., 1925...Orlando
H. MASON SMITH, M.D., 1926...Tampa
JOHN A. SIMMONS, M.D., 1927...Arcadia
FREDERICK J. WAAS, M.D., 1928...Jacksonville
HENRY C. DOZIER, M.D., 1929...Ocala
JULIUS C. DAVIS, M.D., 1930...Quincy
GERRY R. HOLDEN, M.D., 1932...Jacksonville
WILLIAM M. ROWLETT, M.D., 1933...Tampa
HOMER L. PEARSON, M.D., 1934...Miami
HERBERT L. BRYANS, M.D., 1935...Pensacola
ORION O. FEASTER, M.D., 1936...St. Petersburg
EDWARD JELKS, M.D., 1937...Jacksonville
W. HENRY SPIERS, M.D., 1938...Orlando
LEIGH F. ROBINSON, M.D., 1939...Ft. Lauderdale
WALTER C. JONES, M.D., 1941...Miami



GILBERT S. OSINCUP, OUR PRESIDENT

Dr. Gilbert S. Osincup of Orlando was inducted into the presidency of the Florida Medical Association at its Sixty-Ninth Annual meeting, held in Hollywood, April 13 to 15, 1942.

Dr. Osincup was born in Iowa, January 17, 1894, but at an early age moved to Colorado where he received his early education. He attended the University of Tennessee, and in 1916 received his Medical Degree from that University. He served in the United States British Expeditionary Force for two years.

After the war Dr. Osincup served with the United States Public Health Department for three years. He began practice in Orlando in 1923 and has been practicing there ever since.

He was married to Katherine Adrienne Murphy of Toronto, Canada, in 1919.

Dr. Osincup is a Fellow of the American Academy of Pediatrics and a Licentiate of the American Board of Pediatrics. He serves as Chief of Pediatrics at the Orange General Hospital in Orlando; is chairman of the Florida Defense Council, Division of Health and Housing, and is chairman of the Board of Appeals of the Fifth Congressional District.

Our new President is well qualified for his post, having long been prominent in Association affairs. In 1935 he became a member of the Executive Committee and the following year was made chairman of that body, a position he held until he was elected president-elect. For these many years he has given unsparingly of his time and talents to the work of the Association.

The Journal of The Florida Medical Association

Owned and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D.....Orlando
FRANK C. METZGER, M.D.....Tampa
MILLEN A. NICKLE, M.D.....Clearwater
HOMER L. PEARSON, M.D.....Miami
J. H. POUND, M.D.....Tallahassee
W. McL. SHAW, M.D.....Jacksonville

COMMITTEE ON PUBLICATION

HERMAN WATSON, M.D., Chairman.....Lakeland
WARREN W. QUILLIAN, M.D.....Coral Gables
SHALER RICHARDSON, M.D.....Jacksonville

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman....Jacksonville
THEODORE F. HAHN, M.D.....Deland
COUNCIL C. RUDOLPH, M.D.....St. Petersburg

ASSOCIATION'S ANNUAL MEETING

The Sixty-Ninth Annual Meeting of the Florida Medical Association was held in Hollywood, April 13-15, 1942. The total registration was 770. Of this number 434 were members of the Association, 58 were visiting doctors, 7 were from allied groups, 175 were of the Woman's Auxiliary, and 96 were representatives of exhibiting firms. This year's attendance of 770 compares well with the attendance in Jacksonville last year, of 838. The number of members attending this year was 434, as compared with 500 in Jacksonville last year. The Tampa meeting in 1940, with a registration of 879, set an attendance record that has not been surpassed in the history of the Association.

The vital interest of our members in organized medicine was demonstrated by the excellent attendance at the Hollywood meeting, which surpassed all expectations. A number of factors had forecast a smaller meeting. Most of our members now in military service could not attend. The meeting place was not located in the central part of the state, and just a few weeks before the date of the meeting, the officials of the Palm Beach Biltmore Hotel had served notice that the meeting could not be held in that hotel, as originally planned. The sudden transfer of the meeting from Palm Beach to Hollywood naturally caused a great deal of confusion and it was feared it would reduce the attendance. The Palm Beach County Medical Society, through its officers and well organized committees, with the able assistance of Mr. Oscar Johnson, manager of the Hollywood Beach Hotel, and his staff, did everything possible for the comfort and pleasure of the members and guests.

It was a tough spot in which your State Association's staff was placed, as the convention number of the Journal had been printed and was in the bindery before notice was received that the meeting could not be held at the Palm Beach Biltmore Hotel. A tip-in sheet was immediately printed and put in the Journal. Room re-assignments and other changes necessary for the program were rushed to completion and the forty-odd exhibiting firms were notified by telegram and a follow-up letter. Everyone concerned cooperated beautifully, and in spite of unusual difficulties, the meeting has gone down as one of the most successful yet held.

GENERAL SESSIONS

Three general sessions were held during the convention, the first on Monday at 1:30 p. m., when the president's annual address was delivered by Dr. Walter C. Jones, and the joint annual report of Dr. Shaler Richardson, secretary-treasurer and editor of the Journal, and Dr. Stewart Thompson, managing director of the Association, was read by Dr. Richardson. The following guests were recognized: Dr. Mark S. Dougherty, Jr., of Atlanta, and Dr. W. F. Reavis of Waycross, official delegates of the Medical Association of Georgia; Mr. C. P. Loran of Birmingham, Ala., secretary-manager of the Southern Medical Association; and Dr. Frank E. Burch of St. Paul, Minn., the guest essayist of the Florida Society of Ophthalmology and Otolaryngology.

The second general session was held at 3:45 p. m., Tuesday, at which time the guest essayist, Dr. Daniel C. Elkin, Professor of Surgery, Joseph P. Whitehead Foundation, Emory University, Atlanta, Ga., was heard.

The third general session was held at 12 noon, Wednesday, and the following officers were elected: president-elect, Dr. Eugene G. Peek of Ocala; first vice-president, Dr. L. W. Blake of Bradenton; second vice-president, Dr. Lloyd J. Netto of West Palm Beach; third vice-president, Dr. Harrison A. Walker of Miami Beach; secretary-treasurer and editor of the Journal, Dr. Shaler Richardson of Jacksonville. The assignments for regular Association committees, as announced by Dr. Gilbert S. Osincup, may be found in this Journal on the page entitled Officers and Committees.

SCIENTIFIC ASSEMBLIES

Four scientific assemblies, at which 14 papers were presented, were held as scheduled in the

program. In addition to the address of the guest essayist, one of the outstanding features was the Tuesday forenoon session on War Problems. Dr. Herbert E. White of St. Augustine, chairman of the Association's Committee on Scientific Work, and the other members of this committee were highly complimented for their efforts in presenting a splendid scientific program.

HOUSE OF DELEGATES

The first meeting of the House of Delegates convened on Monday at 3 p. m. The invitation of the Pinellas County Medical Society to hold the next annual meeting in St. Petersburg was accepted. Dr. Edward Jelks was reelected delegate to the American Medical Association and Dr. O. O. Feaster was elected his alternate.

The second meeting of the House of Delegates was held Tuesday at 4:30 p. m. The By-Laws of the Association were amended to divide the state into four medical districts and eight councilor districts; and to include as regular members of the Board of Governors the last two immediate past presidents. Full details concerning the actions taken by the House of Delegates may be found in this Journal. At the first meeting 62 delegates were present, and at the second meeting 48 delegates attended. The second meeting of the House of Delegates is always of great importance. This is necessarily so, as at the first meeting all resolutions and reports are read and referred to one of the three reference committees. At the second meeting the reference committees make their recommendations for official action of the House of Delegates. The secretaries of component societies who are interested in the number of their delegates who attended will find the names listed in the proceedings published in this Journal.

SPECIALTY SOCIETIES

During Sunday, and up until noon on Monday, eight specialty groups held annual meetings, at which time excellent scientific programs were presented. The meetings of these societies add greatly to the interest and value of the annual convention and, in the opinion of the majority of our members, serve the interests of the Association much better than would sections. Complete programs of the specialty societies were published in the March Journal.

ENTERTAINMENT

Monday evening and Tuesday evening were devoted to special entertainment. The wonderful

facilities of the Hollywood Beach Hotel permitted entertainment of unusual nature. Dr. Lloyd J. Netto, general chairman of the committee on arrangements of the Palm Beach County Medical Society, served as leader on Tuesday evening.

EXHIBITS

Five scientific exhibits and 40 technical exhibits, supervised by 96 representatives of exhibiting firms, were on display throughout the meeting. The exhibit booths were erected by the American Exhibition Company of Birmingham, Ala., which firm has been doing this work for the Association for a number of years. The technical exhibit hall was attractive, and the exhibitors made a real contribution to the success of our meeting.



MEDICAL POSTGRADUATE COURSE

The Florida Medical Association was one of the first of the state associations to offer regularly to its members graduate medical education. The first course offered was in June of 1932. Being early in this field and offering only a week's work primarily designed for the general practitioner, the question of what to present was one of major importance. The first two years, the lectures were held at the University of Florida, and a number of one and two lecture courses were offered, for instance, one in ophthalmology, two in otolaryngology, and two or three in roentgenology. Gradually these one or two lecture courses were eliminated entirely. The Committee felt that one or two were of little educational value and, because of the short time available, prevented extension of more needed branches. Medicine, pediatrics, obstetrics, and surgery have been presented each time since the beginning. For the last several years, these four subjects, with the addition of gynecology, have been presented.

This year at our Tenth Anniversary the whole time is taken up with the five fundamental subjects, except for the five lectures in venereal diseases. For two years experiments were carried on in offering highly specialized courses for the entire week to groups who wished to take work in a special field. The first year, a week's lectures and demonstrations on the diseases of the chest were given, and the second year the subject was cardiovascular diseases. Both of these courses were well received and highly beneficial. The Committee feels that any group which is large

SCHEDULE FOR MEDICAL POSTGRADUATE COURSE

HOUR	MONDAY June 22	TUESDAY June 23	WEDNESDAY June 24	THURSDAY June 25	FRIDAY June 26	SATURDAY June 27
8:00 a. m.	REGISTRATION					
9:00 a. m.	PEDIATRICS "The Use of Sulfadiazine in Pediatrics" DR. HARRISON	PEDIATRICS "Disturbances of Calcium and Phosphorus Metabolism" DR. HARRISON	PEDIATRICS "Problems of the Newborn" DR. HARRISON	GYNECOLOGY "Gynecology and the Gynecologic Examinations" DR. MONTGOMERY	GYNECOLOGY "Abortion and Ectopic Pregnancy" DR. MONTGOMERY	GYNECOLOGY "Ovarian Tumors" DR. MONTGOMERY
10:00 a. m.	VENEREAL DISEASES "Early Infectious Syphilis" DR. DEIBERT	VENEREAL DISEASES "Neurosyphilis" DR. DEIBERT	OBSTETRICS "The Management of Breech Delivery" DR. EASTMAN	OBSTETRICS "Cesarean Section Part I" DR. EASTMAN	OBSTETRICS "Diabetes in Pregnancy" DR. EASTMAN	SURGERY "Preoperative and Postoperative Treatment" DR. OCHSNER
11:00 a. m.	RECESS	RECESS	RECESS	RECESS	RECESS	GYNECOLOGY
11:30 a. m.	MEDICINE "Hypertension: Newer Concepts of Its Pathologic Physiology, and Efforts at Treatment" DR. WILKINS	MEDICINE "Syncope, Collapse, and Shock" DR. WILKINS	MEDICINE "The Regulated Life for Patients with Chronic Cardio-Vascular Disease" DR. WILKINS	SURGERY "Carcinoma of the Lung" DR. OCHSNER	SURGERY "Treatment of Wounds" DR. OCHSNER	"Acquired Malpositions and Malformations of the Uterus and Vagina" DR. MONTGOMERY SURGERY "Bronchiectasis" DR. OCHSNER
12:30 p. m.	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
2:00 p. m.	VENEREAL DISEASES "Latent Syphilis" DR. DEIBERT	VENEREAL DISEASES "Seroresistant Syphilis" DR. DEIBERT	OBSTETRICS "Heart Disease in Pregnancy" DR. EASTMAN	OBSTETRICS "Cesarean Section Part II" DR. EASTMAN	OBSTETRICS "Birth Control and the Practitioner" DR. EASTMAN	
3:00 p. m.	RECESS	RECESS	RECESS	RECESS	RECESS	
3:15 p. m.	MEDICINE "Pulmonary Embolism; Etiology, Diagno- sis, Prevention and Treatment" DR. WILKINS	MEDICINE "Uses and Abuses of Sedatives" DR. WILKINS	MEDICINE "Vascular Nephritis, Diag- nosis, Course, Prognosis, and Treatment" DR. WILKINS	GYNECOLOGY "Diagnosis and Treatment of Cervical Lesions" DR. MONTGOMERY	GYNECOLOGY "The Young Woman with Disturbed Menstruation" DR. MONTGOMERY	
4:15 p. m.	RECESS	RECESS	RECESS	RECESS	RECESS	
4:30 p. m.	PEDIATRICS "The Treatment of Diarrheal Diseases in Infants in Childhood" DR. HARRISON	PEDIATRICS "Hypothyroidism and Other Endocrine Dis- orders of Childhood and Adolescence" DR. HARRISON	VENEREAL DISEASES Questions DR. DEIBERT PEDIATRICS "Nutritional Problems in Infants in Childhood" DR. HARRISON	SURGERY "Intravenous Thrombosis" DR. OCHSNER	SURGERY "Varicose Veins" DR. OCHSNER	
7:00 p. m.		Dinner Medical Round Table			Dinner Surgical Round Table	
8:15 p. m.	VENEREAL DISEASES Clinic at Duval County Hospital DR. DEIBERT					

enough and willing to defray all expenses of a desired special course should have this type of graduate work made available to them. In addition to the expense of the special course, those participating will pay the usual \$5.00 registration fee.

This year we are presenting the Tenth Graduate Short Course. Many states have undertaken work of this type within these ten years. Graduate medical education in the United States has become a subject of major importance at all national medical meetings. Much study is given to how and where graduate education should be presented to the physicians of the United States. It is the opinion of those who have been interested in this subject in Florida that the Committee should keep in mind two things: first, the desires of the physicians in Florida, and second, the needs of the physicians. The course to be given at the George Washington Hotel, Jacksonville, June 22 to 27, inclusive, fulfills the desires of the physicians of Florida as far as the Committee has been able to ascertain. The needs can only be judged by the desires. The lecturers and subjects presented this year will be up to the standards of any previous year.



FACULTY FOR THE TENTH ANNUAL GRADUATE SHORT COURSE FOR DOCTORS OF MEDICINE

GEORGE WASHINGTON HOTEL
Jacksonville
June 22-27, 1942

MEDICINE

Dr. Robert W. Wilkins, Assistant Professor of Medicine, Boston University.

SURGERY

Dr. Alton Ochsner, Professor of Surgery, The Tulane University of Louisiana, New Orleans.

OBSTETRICS

Dr. Nicholson J. Eastman, Professor of Obstetrics, The Johns Hopkins University School of Medicine, Baltimore.

PEDIATRICS

Dr. Harold E. Harrison, The New York Hospital, New York.

GYNECOLOGY

Dr. Thaddeus L. Montgomery, Professor of Gynecology, Temple University, Philadelphia.

VENEREAL DISEASES

Dr. Austin V. Deibert, P. A. Surgeon, Medical Officer in Charge, Venereal Diseases Medical Center, United States Public Health Service, Hot Springs.

WASHINGTON CONFERENCE ON PROCUREMENT AND ASSIGNMENT

On April 24 there was a meeting in Washington, D. C., of the chairmen of state committees on Procurement and Assignment from the states east of the Mississippi River. Also present from each state were representative officers on active duty in the medical corps of the Army, as well as an officer of the Adjutant General's department of the Army.

It was announced that by the first of January 1943 the Army will need approximately 16,000 doctors more than are now on active duty. In order to facilitate the procuring of these physicians, a plan was presented by which the doctor, in his home state, may contact directly the medical officer and line officer and through them receive directly and immediately a commission, without having to wait for the papers to go through the Surgeon General's office.

For the Army to adopt such an action is further evidence of the immediate need for medical officers. Regardless of what anyone may say about the doctors in the service having little or nothing to do, those who know the situation state unqualifiedly that the quota of doctors stated above is needed if the Army is to be effective in its efforts to win the war.

Any physician in Florida wishing to join the Army may write either to Dr. Edward Jelks, Jacksonville, chairman of the Procurement and Assignment Committee, or to Major Walter E. Murphree, Camp Blanding. He will have the immediate services of representatives of the Surgeon General's and the Adjutant General's offices, to secure for him a commission in as speedy a manner as possible.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. J. K. Norwood of Jacksonville announce the birth of a daughter, Jane Hart, on April 13.

Dr. and Mrs. Lynn W. Whelchel of Miami announce the birth of a daughter, Alice Susan, on April 14.

Dr. and Mrs. E. Clay Shaw of Miami announce the birth of a son, John Lyman, on March 24.

Dr. and Mrs. Van M. Browne of Hialeah announce the birth of a son.

MARRIAGES

Dr. Ferdinand H. Kauders of Miami and Miss Phyllis Salter were married on April 12.

DEATHS

Dr. Earl C. MacCordy of St. Petersburg died on April 5.

STATE NEWS ITEMS

The Florida Section of the American College of Surgeons met in Jacksonville, Friday, March 20. Approximately three hundred physicians from various parts of the state attended this meeting which was conducted as a one-day "war session." Dr. Frederick J. Waas of Jacksonville is chairman of the Florida State Executive Committee and Dr. Edward Jelks of Jacksonville is the secretary. Dr. Walter C. Jones of Miami is councilor.

Dr. Edward Jelks of Jacksonville attended a conference of chairmen of state committees on procurement and assignment, in Washington, D. C., April 24. See editorial section of this Journal for further details.

Partner wanted by Dr. E. W. Ford of Crescent City, to take over his property and practice. Anyone interested is requested to communicate directly with Dr. Ford. *Adv.*

VICE PRESIDENT OF UPJOHN FIRM DIES

Malcolm Galbraith, vice president and director of sales of the Upjohn Company, died Friday morning, April 10, in Kansas City.

Mr. Galbraith was born in Bowmanville, Ontario, Canada, October 23, 1876. He received his bachelor of pharmacy degree at Ontario College pharmacy in 1898, entering in the drug business in Ontario the same year. He later became a naturalized citizen of the United States. In 1909 he left the H. K. Mulford Company, of Philadelphia, to join the Upjohn Company. In October 1929 he was elected to the board of directors and named director of sales. He was made vice president of the company in May, 1936.

COMPONENT COUNTY SOCIETIES

ESCAMBIA

The Escambia County Medical Society held its April meeting on the evening of the 21st at the State Board of Health Building, Pensacola. County Solicitor Forsyth Caro, principal speaker, described to the group the mechanics of enforcing the medical practice act.

LEON-GADSDEN-LIBERTY-WAKULLA- JEFFERSON

The quarterly meeting of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society was held on the afternoon of April 23 at the

Florida State Hospital, Chattahoochee. The following papers were read and discussed:

"X-ray Treatment in Infectious and Nonmalignant Conditions," Dr. O. W. Britt, Tallahassee; discussed by Dr. Edith Norman of Chattahoochee.

"Report of Two Cases of Intussusception," Dr. Ernest Ekermeier, Tallahassee.

"Neuropsychiatry in Aviation Medicine," Lt. Com. Raymond S. Crispell, U.S.N.R., Pensacola.

Dinner was served at the State Hospital.

PASCO-HERNANDO-CITRUS

Dr. and Mrs. J. T. Bradshaw entertained the Pasco-Hernando-Citrus County Medical Society in their home at Dade City, Thursday evening, April 9. A chicken and baked ham dinner was served and enjoyed by all present.

At the business meeting which followed the dinner, Dr. W. Wardlaw Jones was elected delegate to the State Association convention and Dr. W. H. Walters, Jr. was elected alternate delegate. Dr. G. R. Creekmore was elected to attend the Tenth Annual Short Course of the Florida Medical Association, including the course on venereal disease. Dr. Bradshaw, president, appointed Dr. W. H. Walters as liaison officer to work with the Committee on Legislation and Public Policy of the State Association.

Clinical case reports were given and discussed.

Dr. W. Wardlaw Jones of Dade City invited the Society to meet with him in May.

Present were Dr. J. T. Bradshaw, San Antonio; Dr. P. J. Hudson, Crystal River; Dr. W. Wardlaw Jones, Dade City; Dr. W. H. Walters, Lacoochee; and Drs. S. C. Harvard and G. R. Creekmore, Brooksville.

PINELLAS

The Pinellas County Medical Society held a dinner meeting at the Shrine Club on the evening of April 3, at which time the following papers were read and discussed:

"Fractures of the Upper Extremity," Dr. C. L. Farrington.

"Civil Defense," Dr. E. C. MacCordy.

A motion picture on "Regional Anesthesia" was also presented.

On April 8 Dr. Howard Bucknell was host to the society. A round-table discussion was held, for which Dr. D. F. H. Murphey acted as moderator.

POLK

Dr. W. W. Wilson of Tampa, who recently returned from a year's study at the Columbia University Skin Clinic, was the guest speaker at the meeting of the Polk County Medical Society held on April 9 at the Lake Region Hotel, Winter Haven. He spoke on "Skin Diseases", using pictures to illustrate his topic.

The business meeting was in charge of the vice president, Dr. Bruce R. Tinkler of Lake Wales. It was decided to hold the May meeting in Lake Wales.

VOLUSIA

The Volusia County Medical Society held a dinner meeting at the New Smyrna Hotel, New Smyrna on the evening of April 7. Dr. Hanford McKee, Montreal, clinical professor of Ophthalmology at McGill University spoke on "Diabetic Retinitis", and Dr. Hugh West of DeLand presented a paper on "Vascular Diseases."

ABSTRACT DEPARTMENT

Members of the Florida Medical Association who have had articles published in out-of-state medical journals are requested to forward such journals or reprints to Box 1018, Jacksonville, for abstracting in this department.

THE SURGICAL SIGNIFICANCE OF ABDOMINAL WALL PAIN, SMITH, DONALD W., MIAMI, AND BATES, WILLIAM, PHILADELPHIA, SURGERY 9:741-750 (MAY) 1941.

Because abdominal pain is so frequent and its interpretation at times so difficult, the authors have studied the means whereby viscerosensory pain from intraabdominal lesions can be differentiated from parietal pain. They believe that abdominal wall pain is much more frequently due to neuralgia of the nerves supplying the abdominal wall than to a visceral lesion, because postural deformities of the spine and arthritic or articular changes in the spine are much more frequent than generally believed. They describe the "pinch and poke" test which can be used to distinguish between parietal and visceral pain. By understanding the areas of the abdominal wall supplied by the intercostal nerves, parietal pain can be plotted or "blocked off." Many of the operative failures in chronic appendicitis, cholecystitis and salpingitis might be obviated by a more thorough distinction between visceral and parietal pain.

ONE-PIECE ANGLE NAIL FOR TROCHANTERIC FRACTURES, JEWETT, EUGENE L., ORLANDO, J. BONE & JOINT SURG. 23:803-810 (OCT.) 1941.

The author reports the use, in a small number of cases of intertrochanteric fracture of the femur, of a combination of the Hawley bone plate and the Smith-Peterson nail. The disadvantages of the method seemed to be that the plate might loosen in the bone and be rotated on the pin and thus the extra stability gained by the plate would be lost. To obviate such an occurrence, the author devised a flanged nail which in essence is a welding together of the bone plate and the Smith-Peterson nail. When this was used the fixation of the fragments and the alignment of the femur were better maintained. The author also discusses the anchoring during operation of the lesser trochanter which is often displaced in these fractures.

FOREIGN BODIES IN THE BILIARY TRACT, BOWEN, FRED H., JACKSONVILLE, ARCH. SURG. 43:458-461 (SEPT.) 1941.

The author reports a case in which rubber tubing was found in the common bile duct, the remnant of a tube inserted four years previously for drainage and broken off during removal. The symptoms caused were those of obstruction and infection of the common duct.

The author summarizes reports of other foreign bodies found in the biliary tract, such as a swab, the handle of a spoon, the horizontal part of a T tube, a copper bullet, cotton fiber, a piece of L-shaped wire, cotton gauze, a hemostat and a catheter.

ACCIDENTALLY TRANSMITTED MALARIA, MARKS, MEYER B., MIAMI BEACH, ARCH. PEDIAT. 58:357-364 (JUNE) 1941.

The author reviews the literature relative to congenital and accidentally acquired malaria, and reports the case of an infant who, after receiving four intramuscular transfusions, contracted malaria. He concludes that accidental transmission was responsible though in neither of the donors was the disease demonstrable.

Marks advises careful examination of donors and exclusion of all who have at any time had malaria as well as those who come from known malarial regions.



University of Florida—School of Pharmacy

BUREAU OF PROFESSIONAL RELATIONS

TOPICAL SULFATHIAZOLE

A growing field of usefulness for the sulfa drugs is in the treatment of dermatologic conditions, particularly impetigo contagiosa, acute infectious dermatitis, septic ulcers and other streptococcic and staphylococci infections.

The time required to cure impetigo contagiosa with the previous conventional therapy was from twelve to sixteen days. Using sulfathiazole the period of treatment can be reduced to from three to six days, according to Winer and Strakosch.¹ These authors observed that the time required for cure with oral sulfathiazole was twice as long as with topical application and that the possibility of toxic manifestations was always present in using sulfathiazole orally. One ounce of 5 per cent sulfathiazole ointment (1.5 Gm. of sulfathiazole) was usually sufficient for complete cure of impetigo contagiosa, whereas, in tablet form 14.25 Gm. was needed. The bacteriostatic effect of sulfathiazole is not diminished in the proper ointment base, these authors concluded.

Sams and Capland² in a report of 53 cases suggested the use of sulfathiazole in a cod liver oil ointment base. The efficacy of this selection has been further supported by other reports.³ To a mixture of 1 part paraffin and 3 parts petrolatum is added cod liver oil concentrate (20 drops per ounce) to give the equivalent of 100 per cent Cod Liver Oil U.S.P. in the ointment. Such a base has the advantage of promoting granulation through the action of the cod liver oil. It is of such a consistency that it can be easily applied, yet, upon standing, it will not "weep" or cake as will the powdered drug. Cholestrin base (Aquaphor) is particularly adaptable to the incorporation of sulfathiazole.

Lain⁴ reported the use of the sulfa drugs in glycerine. The solution is easily made by adding 4 to 8 Gm. of powdered sulfanilamide to each 30 cc. of slightly warm glycerine. It is applied with a cotton swab or with the fingers to the affected areas two or three times daily without bandaging. He stated that sulfanilamide in glycerin "has proved so successful and gratifying that it has now come to be used in routine treatment."

Sulfathiazole, in the proper ointment base, has distinct advantages in the treatment of im-



The chemical composition of Karo in
glass and in tins is identical

Malnutrition

CALORIC requirements may be neglected in the enthusiasm for vitamins and minerals, hence the value of adding KARO to food and fluids for the 120-calorie yield per fluid ounce.

Free to Physicians

"Infant Feeding Manual For Physicians" is a concise, helpful monograph containing specific information and tested Karo feeding formulas. Sent postpaid.

Please Write Medical Department

CORN PRODUCTS REFINING CO.

17 Battery Place, New York, N. Y.



Dr. Randolph's Sanitarium JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.

PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE

Pres. and Gen. Mgr.

T. EMMETT ANDERSON

Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome

(H.W.&D. Brand of dibrom-oxymercuri-fluorescein-sodium)

is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.



Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

HYNISON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND

Cook County

Graduate School of Medicine

(In affiliation with COOK COUNTY HOSPITAL)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, every two weeks throughout the year. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses.

MEDICINE—Two Weeks Intensive Course will be offered starting June 1st and October 5th. Two Weeks Course in Gastro-Enterology will be offered starting June 15th and October 19th. Two Weeks Intensive Course in Electrocardiography and Heart Disease starting August 3rd.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting June 29th and September 21st. Informal course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting June 15th and October 19th. One Month Personal Course starting August 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting October 5th. Three Weeks Course starting August 10th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting September 14th. Clinical and Special Courses every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered starting September 28th. Five Weeks Course in Refraction Methods starting October 19th. Informal Course every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES.

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

petigo contagiosa over all previous conventional therapy. The short time of care, freedom from complicating reactions, the simplicity of application, and the proved effectiveness of sulfa ointments would recommend their further use.² Such usage adds much to the now great medical value of this group of chemical agents.

1. Winer, L. H., and Strakosch, E. A.: The Value of Sulfathiazole Ointment in the Treatment of Pyogenic Infections of the Skin, *J.A.M.A.* **118**: 221 (Jan. 17) 1942.
2. Sams, W. M., and Capland, L.: Topical Treatment with Sulfathiazole, *Arch. Dermat. & Syph.* **44**: 226-230 (Aug.) 1941.
3. Queries & Minor Notes, *J.A.M.A.*, **117**: 660 (Aug. 23) 1941.
4. Lain, E. S.: Sulfanilamide in Glycerin in Local Treatment for Pyoderma, *Arch. Dermat. & Syph.* **44**: 257-258 (Aug.) 1941.

ADVERTISERS' NOTES

SUMMER DIARRHEA IN BABIES

Casce (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casce. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casce gradually eliminated. Three to six teaspoonfuls of a thin paste of Casce and water, given before each nursing, is well indicated for loose stools in breast-fed babies. Please send for samples to Mead Johnson & Company, Evansville, Indiana.

VITAMIN FILMS IN COLOR

Eli Lilly and Company, Indianapolis, announces the release of three 16-mm. silent motion pictures in color descriptive of vitamin deficiency diseases. The films are available to physicians for showing before medical societies and hospital staffs. One deals with thiamine chloride deficiency, one with nicotinic acid deficiency, and the third with ariboflavinosis. The major part of all films concerns the clinical picture presented by the patient with reference to treatment by diet and specific medication. They do not contain advertising of any description, nor is the name of Eli Lilly and Company mentioned.

The films were made at the Nutrition Clinic of the University of Cincinnati at the Hillman Hospital, Birmingham, Alabama, where studies were initiated in 1935, under the joint auspices of the Department of Internal Medicine of the University of Cincinnati and the University Hospitals of Cleveland. Subsequently, these investigations became a cooperative project between the Departments of Medicine of the University of Cincinnati and the University of Alabama, and the Department of Preventive Medicine and Public Health of the University of Texas.

READING CARD HOLDER AND TEST CARDS

American Optical Company announces a new reading card holder and test cards. The holder is a substantial and attractive imitation leather binding, and contains four cards, including a standard near point and experience reading card, a card showing playing cards, and a reading card which may be used for children or illiterates.

Presentation of the cards in this fashion, AO points out, lends dignity to an examination. The binding keeps the cards clean and fresh, a distinct advantage over the usual handling of each card separately from a file, or a loose collection in a desk or cabinet.



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

Comfortable Site High and Healthful Convenient

E. W. ALLEN, M.D., *Department for Men*
H. D. ALLEN, M.D., *Department for Women*

Terms Reasonable

... in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928

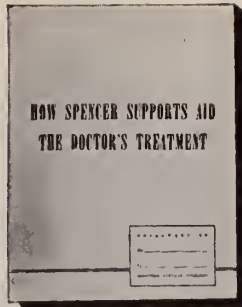
REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Four
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



New Book for Doctors

**"How Spencer Supports
Aid the Doctor's Treatment"**

FOR YOUR COPY JUST SEND COUPON BELOW

Hernia

A patient who had a large hernia... The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Pregnancy and Post-Partum

The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Breast Support for Maternity and Nursing Wear

The Spencer Breast Support... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Definite Support for Even the Heaviest Posed Breasts

The Spencer Breast Support... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Here are pages of case histories showing exactly how a Spencer supports and conceals even the largest hernias; how a Spencer Maternity Corset supports the lower abdomen, permitting freedom at upper abdomen.

These pages demonstrate how a Spencer Breast Support holds in natural position, without constriction, heavy posed breasts; and how Maternity, Nursing and Sleeping Breast Supports are designed to aid the doctor's treatment.

Enteritis With Symptoms

The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Sacro-Iliac and Lumbo-Sacral Sprain

The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Sacro-Iliac and Lumbo-Sacral Sprain

The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Movable Kidney

The Spencer Maternity Corset... It is a light, smooth, and flexible support... It is free from clumsy parts... It is designed to aid the doctor's treatment.

Case histories on these pages show the use of Spencer Supports for dropped abdominal organs, as well as abdominal and Sacro-Iliac Supports for Men, widely used in treatment of industrial workers.

Pages of photographs showing Spencer Supports for sacro-iliac or lumbo-sacral sprain; and for Movable Kidney, both as an aid to treatment and for preventive purposes.

You will want this book to keep as reference — and to show your patients what a Spencer looks like. When patients see how light, smooth and flexible a Spencer is, free from clumsy parts, they willingly cooperate.

Just send coupon for your free copy. No obligation.

SPENCER INDIVIDUALLY DESIGNED
SUPPORTS Abdominal and Back Supports - Breast Supports

THE SPENCER CORSET COMPANY, Inc.
129 Derby Ave., New Haven, Conn.

In Canada: Rock Island, Quebec.

In England: Spencer (Banbury) Ltd., Banbury, Oxon.

Please send me booklet, "How Spencer Supports Aid the Doctor's Treatment."

Address

Address

Address

WOMAN'S AUXILIARY

TO THE

FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

Mrs. F. W. KRUEGER, President.....*Jacksonville*
 Mrs. C. H. MURPHY, First Vice-President.....*Bartow*
 Mrs. P. J. MANSON, Second Vice-President.....*Miami*
 Mrs. Wm. H. BALL, Corresponding Secretary *Jacksonville*
 Mrs. W. C. WILLIAMS, Recording Secretary & Treasurer.....*West Palm Beach*
 Mrs. J. L. ANDERSON, Historian.....*Coral Gables*
 Mrs. LEIGH F. ROBINSON, Parliamentarian *Ft. Lauderdale*

COMMITTEE CHAIRMEN

Mrs. PAUL KELLS, Defense.....*Miami*
 Mrs. S. M. COPELAND, Press & Publicity.....*Jacksonville*
 Mrs. P. J. MANSON, Hygiene.....*Miami*
 Mrs. RUPERT STOVALL, Public Relations.....*Ft. Lauderdale*
 Mrs. E. M. HENDRICKS, Legislation.....*Ft. Lauderdale*
 Mrs. GORDON H. IRA, Finance.....*Jacksonville*
 Mrs. H. A. LEAVITT, Exhibit.....*Miami*
 Mrs. W. J. BARGE, Archives.....*Miami*
 Mrs. GEORGE C. TILLMAN, Student Loan.....*Gainesville*
 Mrs. C. H. MURPHY, Program.....*Bartow*
 Mrs. P. J. MANSON, Organization.....*Miami*
 Mrs. C. E. ROYCE, Bulletin.....*Jacksonville*

DISTRICT CHAIRMEN

Mrs. T. C. KENASTON, General Chairman.....*Cocoa*
 Mrs. LAURIE J. ARNOLD, JR., District "A".....*Lake City*
 Mrs. J. H. OWENS, District "B".....*Jacksonville*
 Mrs. JAMES C. GRIFFIN, District "C".....*Tampa*
 Mrs. LEIGH F. ROBINSON, District "D".....*Ft. Lauderdale*

STATE CONVENTION

Mrs. F. W. Krueger, Jacksonville, was elected president of the Woman's Auxiliary to the Florida Medical Association at the recent state convention held in Hollywood. Mrs. Krueger is well qualified for this office. She attended the State Teachers' College in North Dakota, and Hebron College in Nebraska. She has been active in civic organizations and the Woman's Club of Jacksonville. She is an active member of the Lutheran Church and is now serving as state president of the Woman's Missionary Society. Her father was one of the earliest pioneers of North Dakota, and the fact that she is descended from a long line of ministers gives her a rich background of Christian culture and social ability.

One of the most enjoyable social features of the convention was the beautiful tea held on the lawn of the Hollywood Beach Hotel. A program of music and art sketches of native scenes and birds of Florida were enjoyed by every one. The sight-seeing boat trip down the river was one of the highlights of the convention.

The regular business session of the Auxiliary was held in the Bamboo Room of the hotel on Tuesday morning with the president, Mrs. W. J. Barge, presiding. Rev. J. W. Cooper, pastor of the Methodist Church, delivered the invocation. Mrs. F. K. Herpel gave the address of welcome and Mrs. F. W. Krueger the response.

Dr. Gordon H. Ira, chairman of the State Advisory Committee, addressed the Auxiliary and

*Miami Retreat, Inc.***Established 1927**

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

An eleemosynary or not-for-profit institution. Well equipped for the individual treatment and management of all types of patients.

Special rates may be arranged for persons in straitened circumstances by correspondence.

AIR CONDITIONED

North Miami Ave. at 79th St.

Telephone 7-1824

Resident and Consulting Neuropsychiatrists

**PATRONIZE
JOURNAL ADVERTISERS**

OUR ADVERTISERS BEAR THE STAMP OF APPROVAL OF THE AMERICAN MEDICAL ASSOCIATION AND ALSO OF THE FLORIDA MEDICAL ASSOCIATION. THEY ARE WORTHY OF THE PATRONAGE OF OUR MEMBERS.

*Ambulance Directory***COMBS FUNERAL HOMES**

Ambulance Service

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and mild chronic mental cases also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoye, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle *Funeral Director*

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767

THE TUCKER SANATORIUM, Incorporated

212 West Franklin Street (Corner of Madison)

RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.



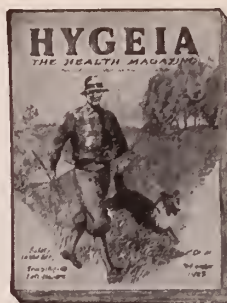
MRS. F. W. KRUEGER, President

congratulated the members for their splendid achievements in the past; he urged them to participate more extensively in national defense activities. He thanked the members for the many courtesies extended to him during his recent illness.

Mrs. S. M. Copeland conducted a memoriam service in memory of those who had passed on since the last convention.

Reports from the officers and chairmen of the various departments showed a decided increase in the activities of the Auxiliary over last year. Courtesy resolutions adopted gave much credit to Mrs. C. W. Williams, general chairman of the hostess Auxiliary, the hotel management and many others responsible for making the convention a great success.

Mrs. Gordon H. Ira installed the new officers in an impressive manner. Mrs. Eugene Peek presented a past president's pin to the out-going president, Mrs. W. J. Barge. A rising vote of thanks was given Mrs. Barge for her untiring services to the Auxiliary. Mrs. Barge introduced the past presidents of the Auxiliary and took her place beside them, making seven in all present at

**HYGEIA**

The Health
Magazine
for Your
Waiting Room
Table

\$3.00 a Year

HYGEIA promotes confidence and understanding between physician and public. It is your own representative, giving in attractive printed form every month the health teaching you want your patients to have.

DIET

EXERCISE

SANITATION

CHILD CARE

RECREATION

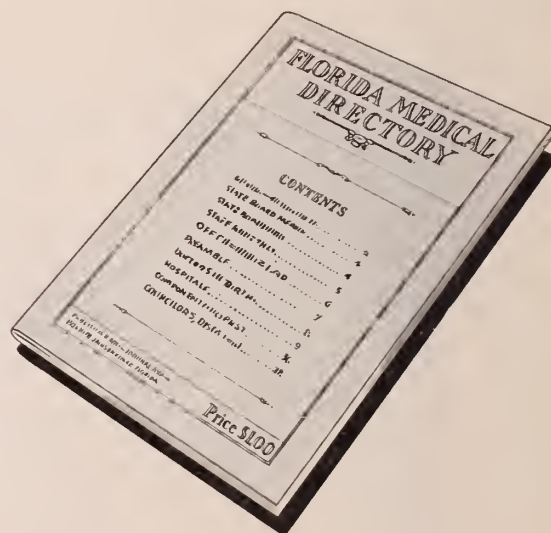
BEAUTY TALKS

SPECIAL OFFER

Six Months for \$1.00!

Pin a dollar bill to this ad and mail to
AMERICAN MEDICAL ASSOCIATION

535 N. Dearborn Street, Chicago

**1942 DIRECTORY**

IS OFF THE PRESS
PLACE YOUR ORDER NOW.
PRICE \$1.00

FLORIDA MEDICAL ASSOCIATION
Box 1018 - - - - JACKSONVILLE, FLORIDA

*"This pause
that refreshes
is a
real idea!"*



Ice-cold Coca-Cola, — pure, wholesome and delicious, — has made *the pause that refreshes* America's favorite moment. Everybody welcomes the refreshed feeling, — the happy after-sense of complete refreshment Coca-Cola always brings.



THE PAUSE THAT REFRESHES

the meeting. Each was presented with a lovely corsage by the hostess Auxiliary. Delegates elected to the national convention were Mrs. W. J. Barge and Mrs. Eugene Peek; alternates, Mrs. C. H. Murphy and Mrs. James Carlisle.

The Auxiliary luncheon, given in the beautiful dining room of the Hollywood Beach Hotel, was well attended. Guest speakers were Dr. Gilbert S. Osincup, incoming president of the Florida Medical Association, and Mrs. Carl Dunaway, a member of the Florida State-wide Public Health Committee. Dr. Osincup extended greetings and a word of appreciation for the opportunity to speak to the members of the Auxiliary. He emphasized the importance of women's work in the national defense program, stating that it would not be an easy task to win the war but with the united efforts of everyone, it could be done. He pledged his interest and cooperation to the Auxiliary during the coming year. Mrs. Carl Dunaway spoke on home defense. She stressed the importance of woman's part in the home, the value of a knowledge of nutrition, and the need for safeguarding the health of the family physically, mentally and spiritually. She said it was the duty of every citizen to keep up the morale of the nation and not to allow the soldiers to worry about their loved ones back home. She said:

Home is the place where the battles will be won; where freedom will be born anew in travail, where selfishness will die in a lonely bed, where courage and sacrifice will come not as strangers, but as welcome guests. Home is where America will keep her rendezvous with destiny.

Tuesday night's tropical banquet brought to a climax the three day conclave. Featured decorations were pineapples surrounded with other native fruits and flowers centering each table. Flags and streamers of red, white and blue lent an atmosphere of true patriotism.

(Registration at Convention, page 550)

ATTENTION PLEASE!

Last Call for reservations for the Twentieth Annual Convention of the Woman's Auxiliary to the American Medical Association, which will be held at Haddon Hall, Atlantic City, New Jersey, June 8-12.

Atlantic City extends a hearty welcome to you!

Send material for this column to Mrs. S. M. Copeland, Publicity Chairman, 1356 Willow Branch Ave., Jacksonville.

INDEX TO ADVERTISEMENTS THIS ISSUE

Allen's Invalid Home	562
American Optical Co.....	512
Attwood, J. K., Pharmacist	512
Borden Co.	511
Brawner's Sanitarium	514
Camel Cigarettes	520, 521
Coca-Cola Co., The.....	567
Combs Funeral Homes (Ambulance).....	564
Convention Press	569
Cook County Grad. Sch. of Medicine	561
Corn Products Refining Co.....	560
Davis, R. B. Co. (Cocomalt).....	518
Everhart Surgical Supply Co.....	512
Ferguson Funeral Home (Ambulance)	564
Florida Medical Directory.....	566
Hoye's Sanitarium.....	565
Hygeia	566
Hynson, Westcott & Dunning, Inc.....	561
Kyle, S. A.	565
Lilly and Company, Eli	522
Mead Johnson & Co.....	572
Medical Writing Service	569
Miami Retreat, Inc.....	564
Miami Surgical Co.....	565
Parke, Davis & Co.....	519
Petrogalar Laboratories, Inc.....	510
Philip Morris & Co., Ltd., Inc.....	516
Physicians Casualty Assn.	514
Randolph's Sanitarium, Dr.	561
S. M. A. Corporation	513
Southeastern Optical Co., The	514
Squibb, E. R. & Sons	515
Spencer Corset Co., The	563
Sun-Ray Park Health Resort.....	562
Surgical Supply Co.....	561
Tucker Sanatorium, Inc.....	565
Upjohn Co., The	517
Wyeth & Bro., John	571

MEDICAL WRITING SERVICE

Assists the Medical Author in the Preparation of Scientific Papers

Manuscripts edited	Manuscripts typed for publication
Literature reviewed	Medicolegal subjects summarized
References completed	Public addresses prepared

EDITH B. HILL
Consultant
Terms Reasonable

935 SOUTH OREGON AVENUE
TAMPA, FLORIDA
Telephone H 27-454

convention press

two eighteen west church street
jacksonville, florida

printers
publishers

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Gilbert S. Osincup, Orlando.....	Shaler Richardson, Jacksonville.....	St. Petersburg, Apr. 12-14, 1943
Florida Medical Districts:			
1-Northwest	Courtland D. Whitaker, Marianna	Stewart Thompson, Jacksonville.....	
1-Northeast	L. Y. Dyrenforth, Jacksonville.....	" " "	Ocala, Oct. 15, 1942
1-Southwest	Edgar Watson, Lakeland	" " "	Sarasota, Oct. 22, 1942
1-Southeast	Lloyd J. Netto, W. Palm Beach ..	" " "	Miami, Oct. 29, 1942
Alabama Medical Association.....	H. B. Searcy, Tuscaloosa	D. L. Cannon, Montgomery.....	Birmingham, Apr. 20-22, 1943
Georgia, Medical Assn. of.....	James A. Redfearn, Albany	E. D. Shanks, Atlanta.....	Atlanta, May 11-14, 1943
Idaho—			
Association, Am. College Phys.....	R. H. Knowlton, St. Petersburg.....	Kenneth Phillips, Miami.....	St. Petersburg, Apr. 11-12, 1943
Internal Society, State.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	Tampa
Intern. and Syph., Soc. of.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville	St. Petersburg, Apr. 11-12, 1943
East Coast Medical Association.....	T. C. Kenaston, Cocoa.....	I. M. Hay, Melbourne.....	Melbourne, 1942
Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	Tampa, June 13, 1942
Industrial Surgeons, Assn. of.....	G. F. Oetjen, Jacksonville.....	Kenneth A. Morris, Jacksonville.....	St. Petersburg, Apr. 11-12, 1943
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman	Jacksonville, June 22-27, 1942
Nurses Association, State.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine	Orlando, November, 1942
Othol. & Otol., Soc. of.....	Shaler Richardson, Jacksonville.....	C. E. Dunaway, Miami.....	St. Petersburg, Apr. 11-12, 1943
Phological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	St. Petersburg, Apr. 11-12, 1943
Pediatric Society.....	Warren W. Quillian, Coral Gables	G. N. Leonard, Miami Beach.....	St. Petersburg, Apr. 11-12, 1943
Pharmaceutical Association, State	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May 19-21, 1942
Public Health Association.....	W. H. Pickett, Jacksonville.....	Lloyd N. Harlow, Jacksonville.....	Miami, Fall, 1942
Physiological Society	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	St. Petersburg, Apr. 11-12, 1943
Flway Surgeons' Association.....	Frank D. Gray, Orlando.....	W. C. Page, Cocoa.....	St. Petersburg, Apr. 11-12, 1943
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	Tampa, May 18-19, 1942
Chahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Birmingham, 1942
Coast Clinical Society.....	G. G. Oswalt, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	
outheastern Surgical Congress.....	Alton Ochsner, New Orleans.....	B. T. Beasley, Atlanta.....	Louisville, Mar. 8-10, 1943
tern Medical Association.....	M. Pinson Neal, Columbia, Mo.....	Mr. C. P. Loran, Birmingham.....	Richmond, November, 1942
nnee River Medical Society.....	L. J. Arnold, Jr., Lake City.....	T. H. Bates, Lake City.....	Lake City, Dec. 1942

COMPONENT SOCIETIES BY DISTRICTS

	SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
					Total	Paid	
A	Bay	M. F. Parker, M.D. Panama City	W. C. Roberts, M.D. Panama City		10	9	A-1-43 C. D. Whitaker, M.D. Marianna
	Escambia *Santa Rosa	A. L. Stebbins, M.D. State Bld. of Health Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P.M.	51	50	
	Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Tuesday Odd Months	6	4	
	Jackson *Calhoun	W. R. Wandeck, M.D. Marianna	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P.M.	10	100%	
	Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P.M.	6	100%	A-2-44 William D. Rogers, M.D. Chattahoochee
	Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		6	100%	
	Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P.M.	11	100%	
	Leon-Gadsden- Liberty-Wakulla- Jefferson	G. H. Garmany, M.D. Tallahassee	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P.M.	40	36	
B	Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	100%	B-3-43 L. Y. Dyrenforth, M.D. Jacksonville
	Taylor *Dixie, Lafayette	J. C. Ellis, M.D. Perry	Chas. V. O'Quinn, M.D. Perry	Last Friday 8:00 P.M.	5	100%	
	Alachua *Bradford, Gilchrist, Union	J. Lee Summerlin, M.D. 1 Baird Bldg. Gainesville	A. T. Cobb, M.D. 331 W. University Ave. Gainesville	2nd Wednesday 7:30 P.M.	30	21	
	Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P.M.	190	189	
	Marion *Levy	B. S. Stutts, M.D. Anderson Bldg. Dunnellon	T. Hartley Davis, M.D. 202 Commercial Bank Ocala	3rd Thursday 12:30 P.M.	28	25	
	Putnam	J. Worth Brantley, M.D. Grandin	Allen P. Gurganus, M.D. Palatka	2nd Tuesday Even Months 7:00 P.M.	10	8	
	St. Johns	W. D. Webb, M.D. 220 St. George St. St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P.M.	12	100%	
	Brevard	G. T. von Colditz, M.D. Route 1 Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	9	B-4-44 Meredith Mallory, M.D. Orlando
C	Lake *Sumter	Louis R. Bowen, M.D. Box 905 Eustis	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P.M.	19	14	
	Orange *Osceola	Spencer A. Folsom, M.D. 319 Exchange Bldg. Orlando	E. E. Hitchcock, M.D. 7 E. Colonial Dr. Orlando	3rd Wednesday 8:30 P.M.	87	78	
	Seminole	C. L. Park, M.D. 515 1st Nat. Bank Bldg. Sanford	O. L. Barks, M.D. Sanford Clinic Sanford	2nd Monday 7:00 P.M.	13	100%	
	Volusia *Flagler	W. C. Pav, M.D. 221 W. Rich Ave. DeLand	R. L. Miller, M.D. 258 1/2 S. Beach St. Daytona Beach	2nd Tuesday 7:30 P.M.	46	39	
	Hillsborough	R. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P.M.	105	91	C-5-44 Leland F. Carlton, M.D. Tampa
	Manatee	L. W. Blake, M.D. Bradenton	M. M. Harrison, M.D. Professional Bldg. Bradenton	3rd Tuesday 7:00 P.M.	14	100%	
D	Pasco-Hernando- Citrus	J. T. Bradshaw, M.D. San Antonio	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P.M.	13	100%	
	Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P.M.	103	100%	
	Sarasota	A. Lamar Matthews, M.D. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P.M.	18	13	C-6-43 Edgar Watson, M.D. Lakeland
	DeSoto-Hardee- Highlands- Charlotte-Glades	L. W. Martin, M.D. Sebring	G. H. McSwain, M.D. Arcadia	2nd Tuesday 8:00 P.M.	19	17	
	Lee *Collier, Hendry	Harvie J. Stipe, M.D. 312 Pythian Bldg. Fort Myers	A. Louis Girardin, M.D. 309 Pythian Bldg. Fort Myers	3rd Tuesday 7:30 P.M.	17	15	
	Polk	J. R. Boulware, M.D. Box 367 Lakeland	Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P.M.	61	55	
D	Palm Beach	James R. Sory, M.D. 616 Harvey Bldg. W. Palm Beach	D. W. Martin, M.D. 618 Comeau Bldg. W. Palm Beach	4th Monday 8:00 P.M.	68	64	D-7-43 Lloyd J. Netto, M.D. West Palm Beach
	St. Lucie- Okeechobee-Indian River-Martin	R. C. Boothe, M.D. Box 408 Ft. Pierce	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P.M.	18	100%	
	Broward	Elbert McLaury, M.D. 210 Hollywood Bk. Bldg. Hollywood	O. C. Brown, M.D. 915 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P.M.	40	100%	D-8-44 Elbert McLaury, M.D. Hollywood
	Dade	Thomas O. Otto, M.D. 704 Huntington Bldg. Miami	Herbert Eichert, M.D. 537 duPont Bldg. Miami	1st Tuesday 8:30 P.M.	337	232	
	Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P.M.	5	100%	

*Supervise and aid until organized separately.

Since 1860



Pharmaceutical Preparations

For eighty-two years John Wyeth and Brother have been manufacturing quality pharmaceuticals. During this period the integrity of the physician's prescription has been maintained by a policy of strict ethical promotion. Wyeth products are not known to the laity. Emphasis is placed on research and production control so that standardized potency and therapeutic effect are always obtained when the physician writes "Wyeth's."

The name Wyeth's is Reg. U. S. Pat. Off.

John Wyeth and Brother, Inc., Philadelphia

He Likes Pablum



Copyright 1939 • MEAD JOHNSON & CO. • Evansville, Ind., U.S.A.

The JOURNAL *of the* Florida Medical Association, Inc.

Vol. XXVIII

JUNE, 1942

No. 12

CONTENTS

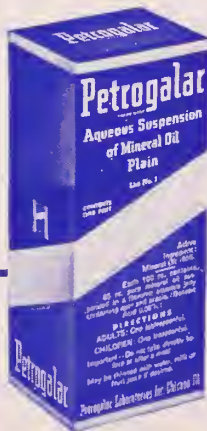
Fractures of the Tibia, Charles B. Mabry, M.D., Jacksonville	583
Digitalis Poisoning, E. C. Chamberlain, M.D., Ft. Lauderdale	586
Hyperthyroidism, Sidney G. Kennedy, M.D., Pensacola	588
Opportunities for Special Work in Student Pilot Training with Special Reference to Air Sickness, Richard C. Cumming, M.D., Lakeland	594
Editorials: Members in Armed Services; Medical District Meet- ings; Annual Tuberculosis Conference; Frank E. Burch, M.D.	598
Physicians Are Urged to Seek Army Commissions Immediately	599
Respirators	600
Tires for Milk Trucks	600
Medicolegal Activities	600
Births, Marriages and Deaths	601
State News Items	601
Component County Societies	602
Convention Echoes	603
Bureau of Professional Relations	604
Woman's Auxiliary	605
Index to Volume XXVIII	605
Index to Authors	612
State and Sectional Meetings	614
Component Societies by Districts	615

Throw out your chest!

- Navy training helps to build strong, healthy bodies.

First in command of establishing health habits in civilian life is the family physician. When the daily routine for regular bowel habits is disturbed, the physician's recommendation of Petrogalar* frequently facilitates a return to normal.

Petrogalar helps soften the stool and renders it mobile for comfortable bowel movement. Consider Petrogalar for the treatment of constipation.



FOR THE TREATMENT OF CONSTIPATION

Petrogalar



*Reg. U. S. Pat. Off. Petrogalar is an aqueous suspension of pure mineral oil each 100 cc. of which contains 65 cc. pure mineral oil suspended in an aqueous jelly containing agar and acacia.

Petrogalar Laboratories, Inc. • 3134 McCormick Boulevard • Chicago, Illinois

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

Doctor—as Judge

PHILIP MORRIS suggests *you* judge . . . from the evidence of your own *personal* observations . . . the value of PHILIP MORRIS Cigarettes to your patients with smokers' cough.

**PUBLISHED STUDIES* SHOWED
3 OUT OF EVERY 4 CASES
CLEARED COMPLETELY ON
CHANGING TO PHILIP MORRIS.**

But naturally, no published tests, no matter how authoritative, can be as completely convincing as results you will observe for yourself.



PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.

119 FIFTH AVENUE, NEW YORK, N. Y.

**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154. Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60*

TO PHYSICIANS WHO SMOKE A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

The Journal of the Florida Medical Association

Owned and published by Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida.

Price \$3.00 a year. Single numbers, 30 cents.

This Journal is not responsible for the opinions and statements of its contributors.

Address Journal of the Florida Medical Association,
Box 1018

Jacksonville, Fla.

Telephone 5-0577

Entered as second-class matter under Act of Congress of March 3, 1879, at the post office at Jacksonville, Florida, October 23, 1924



BRAWNER'S SANITARIUM

Established 1910

SMYRNA, GEORGIA
(Suburb of Atlanta)

*For Nervous and Mental Disorders
Drug and Alcohol Addiction.*

Approved diagnostic and therapeutic methods.

Metrazol and Electro-shock in selected cases.

Special Department for General Invalids and Senile Cases at Monthly Rates

JAMES N. BRAWNER, M.D., Medical Director

ALBERT F. BRAWNER, M.D., Department for Men

JAMES N. BRAWNER, JR., M.D., Department for Women.



HOYE'S SANITARIUM

"In the Mountains of Meridian"

Meridian, Miss.

Diagnosis and Treatment of NERVOUS AND MENTAL DISEASES, ALCOHOLIC AND DRUG ADDICTIONS, Especially Equipped for the treatment of MENTAL DISORDERS and those requiring ELECTRO SHOCK THERAPY. Convalescents, elderly people and mild chronic mental cases also admitted.

Write P. O. Box 106 or Telephone 524

Dr. M. J. L. Hoye, Supt.

*Fellow of the
American Psychiatric Association*

Telephone 3-1302

MIAMI SURGICAL COMPANY

B. MARIAN BEALS
President-Treasurer

ESTABLISHED 1926

Hospital and Physicians' Supplies

Headquarters for Laboratory Supplies, Laboratory Chemicals and Reagents

172 S. E. FIRST ST.

We respectfully solicit your orders

MIAMI, FLORIDA

S. A. Kyle Funeral Director

17 WEST UNION STREET

Phones



JACKSONVILLE, FLORIDA

5-3766 5-3767



From a woodcut of Albrecht Durer (1471-1528) representing the first appearance of syphilis in Nuremberg in 1496.

A Brilliant Record

OF EFFECTIVENESS AND SAFETY

The two prime requisites of an antiluetic, effectiveness and safety, are fulfilled in Mapharsen.*. Scores of medical papers during the last decade record its relative safety and low incidence of reactions in comparison with other arsenicals.

A review of the literature since 1935 reports on 269,326 injections of Mapharsen with a ratio of one death to 67,332 patients, which is less than one-half the death rate from neoarsphenamine.¹ Only six fatalities have been reported from several million doses of Mapharsen.

Mapharsen (meta-amino-para-hydroxy-phenylarsine oxide hydrochloride) contains 29 per cent arsenic in trivalent form and requires only one-tenth the arsenical dosage of arsphenamine. It is decidedly convenient to use as it does not require neutralization before injection.

1. Levin, E. A. & Keddie, Frances: *J.A.M.A.* 118:368, 1942

Supplied in 0.04 Gm. and 0.06 Gm. single-dose ampoules, and in 0.4 Gm. and 0.6 Gm. multiple-dose (10 dose) ampoules.

*TRADE MARK REG. U. S. PAT. OFF.

Mapharsen

A PRODUCT OF MODERN RESEARCH
OFFERED TO THE MEDICAL PROFESSION BY

PARKE, DAVIS & COMPANY

DETROIT



MICHIGAN

OVER 75 YEARS OF SERVICE
TO MEDICINE AND PHARMACY

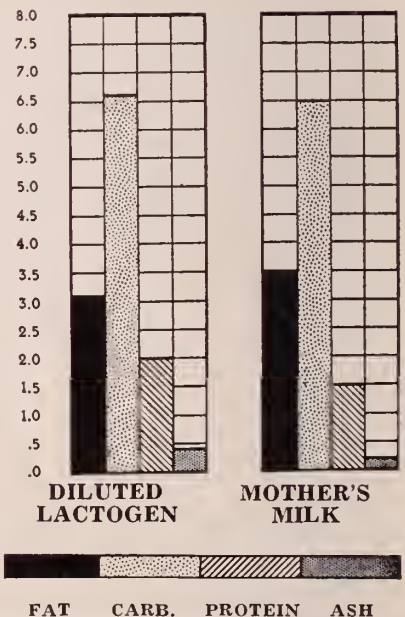


LACTOGEN
approximates
women's milk in the
proportion of
food substances

THE cows' milk used for Lactogen is scientifically modified for infant feeding. This modification is effected by the addition of milk fat and milk sugar in definite proportions. When Lactogen is properly diluted with water it results in a formula containing the food substances — fat, carbohydrate, protein, and ash — in approximately the same proportion as they exist in woman's milk.

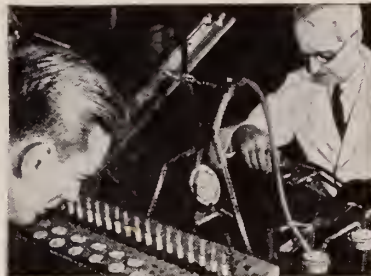
No advertising or feeding directions except to physicians. For free samples and literature, send your professional blank to "Lactogen Department," Nestlé's Milk Products, Inc., 155 East 44th St., New York, N. Y.

"My own belief is, as already stated, that the average well baby thrives best on artificial foods in which the relations of the fat, sugar, and protein in the mixture are similar to those in human milk."—JOHN LOVETT MORSE, A.M., M.D., Clinical Pediatrics, p. 156.



NESTLÉ'S MILK PRODUCTS, INC.
155 EAST 44TH ST., NEW YORK, N. Y.

SMOKING HYGIENE SIMPLIFIED



LESS NICOTINE IN THE SMOKE*

When planning to reduce a patient's nicotine intake, you may be concerned with this question: Will your patient really cooperate with an *effective* reduction program?

Camel Cigarettes may be the answer regardless of whether or not your patient cuts down on smoking: Camels may provide a

substantial reduction in nicotine intake,* a conclusion accepted by America's highest medical authorities.

There is added significance in medical research that indicates: Differences of as little as 25% in nicotine intake produce profound physiologic changes.**

INVITING PATIENTS' COOPERATION



Patients are apt to be quite thankful for your recommendation of a change to Camels. Slow burning, which according to scientific tests produces less nicotine in the smoke,*** also provides a milder, mellower, more flavorful smoking experience. Slow-burning Camel's blend of finer, more expensive tobaccos is 'famous for its "pleasure factor."'



*THE SMOKE OF SLOW-BURNING CAMELS contained less nicotine than that of the 4 other largest-selling brands tested—less than any of them—according to independent scientific tests of the smoke itself! In the same tests, CAMEL burned slower than any of the 4 other largest-selling brands tested.

***The Military Surgeon*, Vol. 89, No. 1, p. 5, July, 1941

****J.A.M.A.*, 93:1110—October 12, 1929
Brückner, H.—*Die Biochemie des Tabaks*, 1936

REPRINT AVAILABLE of an important contribution to the medical literature on smoking—"The Cigarette, The Soldier, and The Physician," *The Military Surgeon*, July, 1941. There are many new angles on smoking experience revealed in this analysis—an aid to you when modifying patients' smoking without disturbing their smoking enjoyment. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

CAMEL

THE CIGARETTE OF COSTLIER TOBACCOS

America Needs KEEN EYES

Army and Navy personnel, industrial defense workers and civilians cannot contribute their best efforts to the drive for Victory unless their eyes are *right*.

More reason than ever before is this, to have all your prescriptions made up in top-quality Bausch & Lomb optical products—Orthogon,★ Panoptik,★ Ray-Ban, Loxit.

★ In Soft-Lite, too.

The SOUTHEASTERN OPTICAL CO., Inc.
distributors of **BAUSCH & LOMB** products



....in Miami, Florida



SUN-RAY PARK HEALTH RESORT

ESTABLISHED IN 1928

REGISTERED SANITARIUM

With Cheerful Hotel Atmosphere
For Rest, Convalescent, Chronic
and Acute Medical Cases

Separate Buildings and
SPECIAL FACILITIES
for Mild Mental, Alcoholic
and Narcotic Cases

Graduate Nursing and Dietetic Staff, Resident
Physician. Complete Physical Therapy. Four
Acres Beautifully Landscaped Grounds. Sports,
Recreations, Occupational Therapy.

125 S. W. 30th Court, Miami, Florida



Allen's Invalid Home

MILLEDGEVILLE, GA.

Established 1890

For the treatment of
NERVOUS AND MENTAL DISEASES

Grounds 600 Acres

Buildings Brick Fireproof

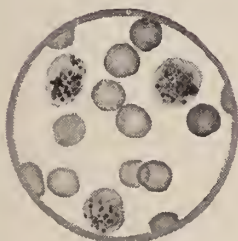
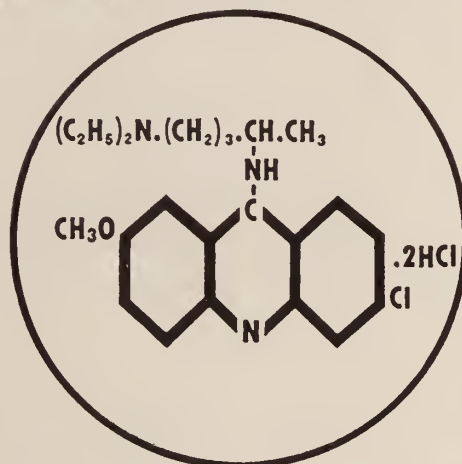
Comfortable Convenient
Site High and Healthful

E. W. ALLEN, M.D., Department for Men
H. D. ALLEN, M.D., Department for Women

Terms Reasonable

Synthesis

IN OUR LABORATORIES



Acute attacks of malaria are checked rapidly — within a day or two.... Parasites in the blood stream disappear quickly — in a week or less. . . . The dose is small — in the average adult case only 1½ grains three times daily for five days.



Antimalarial Specific



A T A B R I N E

Reg. U. S. Pat. Off. & Canada

BRAND OF CHINACRIN

DIHYDROCHLORIDE

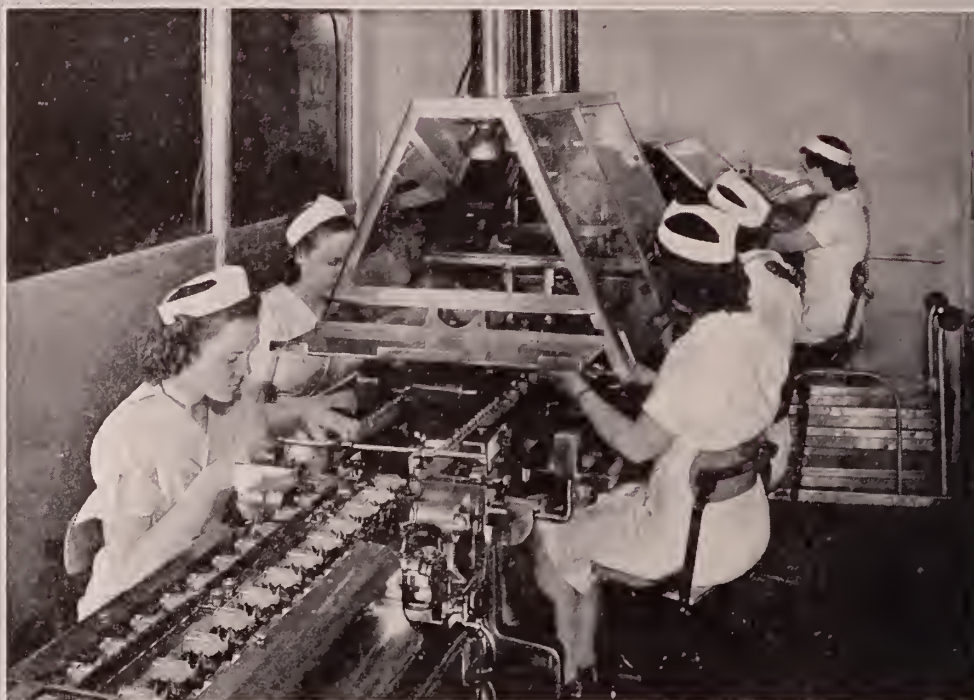
7-methoxy-3-chloro-9-(1-methyl-4-diethyl-amino) butylamino-acridine

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK, N. Y.

WINDSOR, ONT.



The art of doing things well

SIXTY VIALS a minute, each vial filled with exactly the same amount as its predecessor. A vial every second—aseptically stoppered under protecting glass shields in a room where even the air is filtered. These are the familiar vials of Protamine, Zinc & Iletin (Insulin, Lilly) ready to receive the label which marks their potency. Preparations of Iletin (Insulin, Lilly) are weeks in the making but every minute is spent under the direct control of experts who know the art of doing things well.



Eli Lilly and Company

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U.S.A.

FRACTURES OF THE TIBIA

CHARLES B. MABRY, M.D.

JACKSONVILLE

Increased traffic by automobile and heavy vehicle has raised the incidence of fracture of the tibia. The number of injuries of this type seems to be slowly increasing. The problem of treatment is, therefore, receiving attention from larger numbers of physicians than formerly. The students of this problem differ in opinion as to the best method of treatment. Some investigators^{1, 2} recently presented statistics to prove that all spiral fractures of the tibia should be treated by immediate open operation with internal fixation. Others, equally competent, agreed that conservative therapy is the treatment of choice. Only the collection of large groups of statistics over a period of time will conclusively answer the problem. The treatment of fracture of the tibia is always accompanied by great interest and due respect because there is ever the threat of nonunion.

The observations made here are the conclusions reached on studying a series of 396 cases of fracture of the tibia treated in the last ten years in four of Jacksonville's hospitals. During this period I have been constantly trying to set fractured tibias as close to their normal anatomic position as possible, and then to maintain them in this position. I make no claim of originality for the treatment here described although I have seen no reference to it in the literature. It is but a slight variation of other methods and is offered because of its simplicity. The brief time allotted prohibits a consideration of fractures of the tibial plateau and those involving the knee joint. For the same reason, fractures of the malleoli, Pott's fractures and those involving the ankle joint must of necessity be left for some other time. These brief remarks deal with fractures of the tibial shaft only.

The tibia ranks next to the femur in size and length. Its form is prismoidal. The upper extremity is much larger than the lower. It is narrowest at the junction of the middle and lower thirds. The nutritive canal enters posteriorly just below the popliteal line and extends downward, ramifying through the bone. The greatest blood supply is in the cancellous bone in the ex-

tremities. The least blood supply is at the junction of the middle and lower thirds where the bone is of dense cortical type and where the diameter is smallest. It is here also that fracture most frequently occurs.

The severity of the violence determines whether the fracture is simple, compound, or comminuted, and whether or not the fibula is involved. Indirect force usually causes the typical oblique type. The deformity is usually observed with the distal fragment displaced posteriorly and upward. This displacement is caused by combined action of the muscles. The quadriceps tends to hold the proximal fragment anteriorly and to pull it upward. The gastrocnemius and soleus tend to produce anterior bowing, and gravity tends to displace the distal fragment posteriorly when it is supine. An example of this indirect force is offered when the heel of the shoe becomes caught in a fixed hole in the street, holding the foot firm, and a force applied to the knee or above causes hyperflexion with rotation of the tibia in excess of its structural strength. Direct force causes a transverse fracture. Spiral fractures are caused by a rotary force. Usually two or more forces act simultaneously.

Wilson³ reported a series of 149 cases of fracture of the tibia treated in the Massachusetts General Hospital, 49 of which were cases of compound fracture. Delayed union or nonunion occurred in 12 per cent. In his report were included all fractures of the tibia, both simple and compound, and the statistics presented offer a fair sample of the results obtained in most bone clinics during the last decade.

Of the 396 cases of fracture of the tibia presented here, nonunion occurred in 27, or 7 per cent. In 24 per cent of the cases of this series the age of the patients ranged between 15 and 25 years. The incidence of this injury in men predominated by about two to one. The average healing time was twelve weeks. The shortest healing time was four weeks in a 6 year old child; the longest was eighteen months in a young man with a compound fracture. In 21 per cent of the cases the fracture was compound. Each case in which nonunion occurred was studied to ascertain the cause. Usually it was observed in cases of compound fracture in which, in view of later experiences, I now feel there was inadequate immobilization.

Read before the Fifth Annual Meeting of the Northeast Medical District, St. Augustine, Oct. 4, 1941.



Fig. 1. Introduction of Steinmann pins.

My first method of treating the fractured tibia consisted of a reduction by traction, followed by the use of the usual snug-fitting leg cast extending from the toes to the groin, with the knee flexed at 30 degrees. In spite of the fact that this type of cast was changed to compensate for muscular atrophy, nonunion sometimes occurred. This was the generally accepted method of treating simple fractures.

The next method tried was as follows: A Steinmann pin was placed through the lower third of the tibia; an unpadded cast was then applied from the toes to the groin with the leg in full extension, and the cast was split to allow for edema. Ten pounds of traction was kept constantly on the pin. This method was successful and resulted in almost no instances of nonunion for a period of several years. Its faults were that the patient had to be kept constantly in bed with the foot of the bed elevated. Occasionally a patient would slip down far enough to allow the cast to press against the foot of the bed, causing the bone to slip from its desired position. Union was expected in from four to seven weeks.

Almost every other method has been tried, including the use of the Braun splint, the Thomas knee splint and the Griswold frame as well as various open reductions, including plating, wiring, nailing, screwing and pegging. The Parham band has seldom been used because I cannot subscribe to its constricting principle and because the metal of which it is made is high in the electrolytic series.

While circulation in the lower third of the tibia is not as good as in the remainder of the bone, I have nevertheless long believed that the



Fig. 2. Reduction in pendent position by traction.



Fig. 3. Application of cast incorporating pins.



Fig. 4. Completed cast split to allow for traumatic edema.

cause of nonunion is not of circulatory origin. Neither have I come to the conclusion that the dense cortical type of bone in this area, which does not lend itself easily to healing, explains nonunion in this region. I have become con-

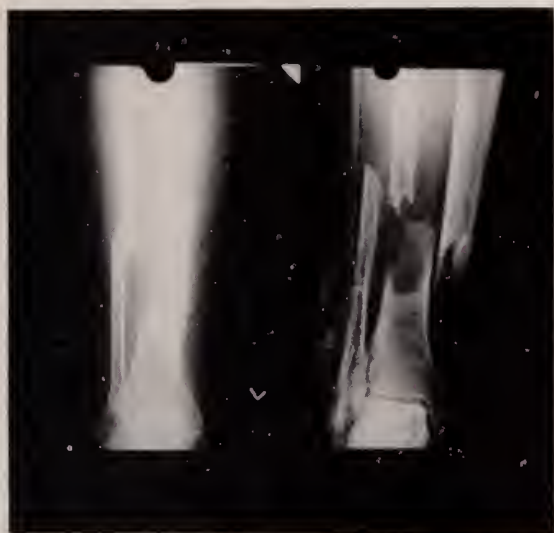


Fig. 5. Oblique fracture before reduction.



Fig. 6. Oblique fracture reduced and in cast.

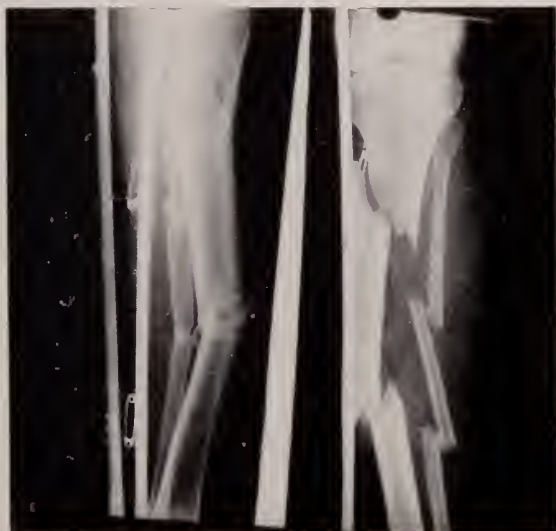


Fig. 7. Comminuted fracture before reduction.

vinced that inadequate immobilization is almost invariably the cause of delayed healing of bone. Consequently, the problem of devising some method of better fixation presented itself.

Steinmann pins and various wires placed above and below the fracture have been used for a number of years. Their use, however, has been accompanied by the employment of various devices and gadgets which have made the procedure complicated. It occurred to me that the use of skeletal fixation without the aid of these machines of traction and torsion would simplify the problem. After attempting several methods, I found that it was extremely easy to insert the pins in the position desired (*fig. 1*) and then bring the patient down so that the knee would hang over the foot of the table, in which position reduction could be easily accomplished (*fig. 2*). As a result of this procedure, flexing relaxes the hamstrings and the Achilles tendon, and permits gravity to aid in traction instead of opposing. Steinmann pins are preferred for stabilization for several reasons; they are easy to drill through the bone, they cause little pain, they are rigid enough to hold bone in a fixed position without attaching special clamps (*figs 3 and 4*) as must be done with Kirschner wires, and the hole made in the bone by a Steinmann pin heals just as quickly as that made by a small wire. These pins rarely ever cause infection of the skin if collodion is applied before the plaster (*figs. 5, 6, 7 and 8*).

In cases of compound fracture débridement is carefully carried out if the wound is at all large. Internal fixation is accomplished by the use of vitallium screws and plates if the frag-



Fig. 8. Comminuted fracture reduced.

ments are spiral, or if the bones do not lock in anatomic position. I am having excellent results with vitallium in treating compound fractures and am now using it in almost all cases. The wound is filled with sulfanilamide powder, as recommended by Key, Frankel and Burford,⁴ and it is closed if possible. If closure is impossible, the Orr vaseline treatment is sometimes used. At other times, the wound has been left open in a split cast with skeletal fixation for a few days after the method of Böhler.⁵ It is seldom necessary to operate in cases of closed fracture as sufficient traction properly applied will reduce almost any displacement.

What happens when bone, such as the tibia, heals? First, there is immediate death to the traumatized cells with hemorrhage. Next, there is inflammation, engorgement of the capillaries and an accumulation of autolytic exudate, with stagnation of capillary circulation. Soon there occurs a localized acidosis or lowered hydrogen ion concentration. This change takes place within the first few hours. The clotting blood forms a fibrinous network. The acid hydrogen ion concentration continues to decalcify the cells of the necrotic bone. There next appear almost primitive connective tissue cells derived from changes in mesothelial cells adjacent to the injury. These cells are observed between twenty-four and thirty-six hours after the injury and travel on the fibrinous network. Unprecipitated calcium now begins to accumulate at the site of the fracture. Gradually the capillary circulation rises and removes the autolyzed products. The hydrogen ion concentration gradually rises with more efficient circulation, and as it rises, calcium begins to be deposited in the newly formed tissues. Also because the phosphatase becomes activated with the rising hydrogen ion concentration, the deposition of calcium increases. Thus callus accomplishes the work of repair.

If the newly formed tissues become adult fibrous tissue before calcium is deposited, a fibrous union occurs. It is observed in cases of insufficient immobilization due to repeated moving and injury. Union should occur under ideal conditions in twenty-eight days.

The problem of immobilization has been met by two Steinmann pins placed through the tibia; the bones are then reduced while in the pendent position. An unpadded cast is applied, which incorporates the pins. The cast is then extended to the groin and is split anteriorly to allow for trau-

matic edema. This method of treatment shortens the period of hospitalization, causes earlier union and expedites recovery.

BIBLIOGRAPHY

1. Mansfield, R. D.: Treatment of Oblique Spiral Fracture of Both Bones of The Leg, *J. Bone & Joint Surg.* **23**:910 (Oct.) 1941.
2. Hurdock, S. S.: Fractures of the Tibia in Adults, *J. Bone & Joint Surg.* **23**:896 (Oct.) 1941.
3. Wilson, P. D.: Experience in the Management of Fractures and Dislocations, Philadelphia, J. B. Lippincott Co., 1938.
4. Key, J. A.; Frankel, C. J., and Burford, T. H.: Local Use of Sulfanilamide In Various Tissues, *J. Bone & Joint Surg.* **22**:952-958 (Oct.) 1940.
5. Böhler, L.: Treatment of Fractures, Baltimore, William Wood & Co., 1935.

439 St. James Bldg.

DIGITALIS POISONING

E. C. CHAMBERLAIN, M.D.

FORT LAUDERDALE

Digitalis is a poison. It owes its beneficial effect upon the circulation to the fact that it is a poison. The original postulates of Withering governing the clinical use of digitalis advocated the administration of the drug until one of the well known toxic effects took place. When, during the course of its administration, digitalis begins to act on "the heart, the bowels, or the kidneys," the therapeutic stage is reached, and dosage much beyond this level enters into the toxic range.

Digitalis poisoning rarely occurs because of faulty administration of the drug by the physician. Because of their recognition of the possible toxic effects of digitalis many physicians are reluctant to continue medication with this drug to the full therapeutic stage, and much digitalis therapy is in consequence not of full value.

Elderly persons are prone to be the victims of digitalis poisoning. They are the ones to fancy themselves suffering from cardiac disease, and of course they know of digitalis. It has probably been prescribed for them in the past in minimal doses as a tonic for the heart or as an aid to the circulation. It can again do no harm, they conclude; so medication is started on their initiative in small doses. Enough is taken, however, to allow for cumulation. As the toxic range is reached, they become confused as a result of this therapy. This disturbance is one of the earliest signs of slow digitalis poisoning. As judgment is impaired, the medication is continued until a real poisoning has occurred. Then, too, the patient falling into the geriatric range of practice does not tolerate well full dosage of digitalis. There

Read before the Fifth Annual Meeting of the Southeast Medical District, Hollywood, Oct. 30, 1941.

are present myocardial fibrosis and impaired circulation to the conduction system, both of which are factors in the sensitization of the heart to the effects of digitalis. The relative ischemia of the higher centers, as well, conditions them for earlier response to digitalis, and faulty reasoning is facilitated by minor toxic effect.

Digitalis exerts its effect by several mechanisms. It causes increased contractility of cardiac muscle with a lowered threshold of irritability, which causes prolonged contraction with corresponding lengthening of the refractory period. This lengthening of the refractory phase is greatest in those structures normally having the shortest refractory periods, namely the conduction tissue. The tone of the cardiac muscle is increased so that systolic shortening becomes greater and more prolonged and diastolic relaxation less complete. On these two properties of digitalis are based its therapeutic efficacy.

Digitalis in larger doses acts on the vagus center and other medullary centers, either through cardiac reflexes or directly. The effects on the vagus are diametrically opposite to those on the cardiac muscle. They consist of lessened contractility with resultant increased conduction and shortening of the refractory period. The tone of the cardiac muscle is decreased so that systolic shortening is less complete and diastolic relaxation greater. The effects on both the muscle and the vagus tend to produce block, the muscle being affected by prolongation of conduction and the vagus by raising the threshold of irritability.

In mammals continuous administration of digitalis to poisonous levels is manifested in three stages, the therapeutic, the vagus and the muscular. The therapeutic stage can be reached in the course of digitalization only under conditions of the circulatory system that make it possible for digitalis to have an effect. This statement seems superfluous, but more than one hundred years ago digitalis lost favor as a therapeutic agent because of its failure to slow the heart's action associated with fever, thyrotoxicosis and peripheral circulatory collapse. It is useless to expect it to be of aid in these conditions. In the presence of shock and tachycardia due to severe infectious disease the drug may even be detrimental, a type of digitalis poisoning mentioned only in passing, although under these circumstances it is usually given in such small doses that no help could be expected even if this therapy were indicated.

The therapeutic action of digitalis on a heart amenable to treatment brings about improved tonicity and contractility with resultant increase of diastole and diastolic filling. Increased cardiac output results. Under certain conditions slowing of the pulse takes place through action on the conduction system and through improvement of the dynamics of the circulation.

The vagus or inhibitory stage is indicated by strong vagus action. The pulse rate drops to 40 or 50; the ventricles may beat independently of the auricles, or there may be various degrees of block. The stage of muscular irregularity then supervenes with a rapid pulse rate, the increased irritability leading to extrasystoles, bigeminal rhythm and, in the extreme, a failing circulation terminating in ventricular fibrillation.

Overdosage with digitalis leads to toxic symptoms of nausea and vomiting preceded for a few days by anorexia, headache, vertigo and slow cerebation. The margin of safety between the therapeutic and toxic effects of digitalis is wide in the ambulatory patient, but in the patient with severe cardiac decompensation the margin may be narrow. Following the noncardiac central effects, the vagus effect and that of muscular irritability intervene and cause premature contractions, coupled rhythms, various degrees of auriculoventricular block, auriculoventricular nodal rhythm, pulsus alternans, paroxysmal tachycardia and auricular fibrillation. The toxic effect of the acceleration of the pulse rate and the onset of auricular fibrillation, especially in children, should be borne in mind.

Other occasional effects are blurring of the vision and pronounced disturbances in color vision with objects appearing green, yellow, white, or lavender. Diarrhea, reduction of the output of urine and acute psychopathic outbreaks are additional disturbances sometimes observed.

Fatal digitalis poisoning by fractional dosage is rare because emesis and catharsis prevent absorption of enough of the drug to reach the extremes of the stage of muscular irritability which terminate in death. McGuire and Richards¹ reported a fatal case of digitalis poisoning in which the patient took 6 to 8 ounces of tincture of digitalis with suicidal intent. This case illustrates the advanced vagal and central effects with a stage of muscular irritability leading to death.

A patient observed last winter was a veritable museum of the toxic effects of digitalis. Briefly the following is a report of her case with emphasis

on the aspects pertaining to digitalis.

REPORT OF CASE

The patient was a 71 year old white woman. She was found unconscious early one morning by friends with whom she was staying, who knew nothing of her past history. She had vomited in the bed. She could be aroused only with difficulty, was confused and could not articulate clearly. A bottle of medicine, apparently tablets of digitalis folia, was found among her possessions bearing a label with directions for taking 1 tablet three times a day. Examination gave no clue as to the condition from which she suffered. The temperature was 101 F., the pulse rate 88 and the respiratory rate 24.

When the patient was admitted to the hospital, examination of the blood showed that the sugar content was 164 mg. per hundred cubic centimeters. The urine gave a 4 plus reaction for sugar, and the presence of acetone and diacetic acid was noted. Treatment was instituted for diabetic acidosis. By the next day the urine was free of sugar and acetone, and the sugar content of the blood was normal, but the pulse rate had dropped to 50. The patient remained unconscious. Cardiovascular examination at the time the patient was admitted and subsequently revealed a greatly enlarged heart with precordial pulsation indicating forceful cardiac activity. There were no murmurs. The blood pressure was 180 systolic and 100 diastolic; the peripheral vessels were sclerotic. An electrocardiogram demonstrated the presence of auricular fibrillation, low voltage and the effect of digitalis.

On the second day the urinary output was diminishing, the respirations were of the Kussmaul type, and the patient could not be aroused. The nonprotein nitrogen content of the blood was 40 mg. per hundred cubic centimeters. Despite availability of fluid by hypodermoclysis complete anuria was present for the twenty-four hours of the third hospital day. The administration of 2 cc. of depropanex and 3 minims of 1:1000 adrenalin every two hours for four doses initiated diuresis, and soon afterward the patient became conscious.

For the next four weeks the patient was completely disoriented and for most of this time could not be left alone for a moment. During the second week, when questioned about colors, she described her bed as having tan linen and the nurse as wearing a tan uniform. Other colors were described as if they had been altered by the addition of tan to the original color.

After five weeks the patient, still slightly confused mentally, was discharged from the hospital. The pulse rate had risen to an average of 60 at the time of discharge. She now admitted the taking of 3 digitalis tablets a day over a long period of time, but was still unable to give even an estimate of the time involved.

The electrocardiogram in this case gave only slight evidence of the effect of the digitalis, which was probably obscured to a considerable degree by the low voltage. It demonstrated the fact, however, that the effect of digitalis as shown in the electrocardiogram is not quantitative.

SUMMARY

The pharmacologic properties of digitalis have been briefly reviewed in reference to the therapeutic stage and to the toxic effects exhibited in the vagus stage and the stage of muscular irritability. The noncardiac central effects on the higher centers of the nervous system are enumerated. A case is reported which demonstrates most of the toxic effects of digitalis and emphasizes the less common effects of digitalis poisoning such as suppression of urine, acute psychosis and the

pronounced changes in color vision. The case illustrates, too, the occurrence of digitalis poisoning in the aged, in whom, because of the relative ischemia of the myocardium and cerebrum, poisoning from digitalis may easily occur.

BIBLIOGRAPHY

1. McGuire, J., and Richards, C. E.: Fatal Digitalis Poisoning Occurring in Normal Individual, *Am. Heart J.* **12**: 109-112 (July) 1936.
2. Carr, J. G.: Digitalis Delirium, *Clin. N. Amer.* **9**: 1391-1398 (March) 1926.
3. Sollmann, T.: *A Manual of Pharmacology*, vol. 4, p. 503.
4. Stroud, W. D.: *Diagnosis and Treatment of Cardiovascular Disease*, vol. 2, ch. 31.

720 Sweet Bldg.

HYPERTHYROIDISM

SIDNEY G. KENNEDY, M.D.

PENSACOLA

In reviewing the literature on thyroid disease one is amazed by the vast amount of material accumulated through the years on this subject. When one considers the importance of the thyroid gland as exhibited primarily through its functions or dysfunctions and secondarily through its interrelation with other glands of internal secretion, it is easy to understand how this subject has intrigued investigators from the time of Galen¹ to the present day.

The scope of this paper is limited to a discussion of hyperthyroidism. It seems well, however, at this point to outline various clinical types of goiter. The American Society for the Study of Goiter has approved the following outline in an effort to clear up confusion that has existed owing to the many classifications made by the various groups interested in this disease:

1. Smooth or diffuse nontoxic goiter (endemic or colloidal type)
2. Smooth or diffuse toxic goiter (endemic type which has become toxic, exophthalmic goiter or Graves' disease)
3. Nodular nontoxic goiter (nontoxic adenoma)
4. Nodular toxic goiter (toxic adenoma)

ETIOLOGY

The etiology of toxic goiter is unknown. In the opinion of Thompson² several factors may work to bring about this condition: (1) overproduction of the thyrotropic factor by the anterior lobe of the pituitary, (2) some disorder of the sympathetic nervous system, (3) a disturbance of some center controlling thyroid function in the base of the brain and (4) some abnormality of the thyroid itself.

It has been established that thyroid and pituitary functions are interrelated. The thyrotropic factor from the anterior lobe of the pituitary, though inert in the absence of thyroid tissue and causing symptoms of a toxic condition of the thyroid in persons with a normal basal metabolic rate, gives no positive proof that it is the cause of toxic goiter.

The possible production of hyperthyroidism through overstimulation of the sympathetic nervous system is of particular interest. In this era of machines and speed, the resulting stress and strain have their effect on the sympathetic nerves and would seem, through excessive stimulation of the thyroid, to result in a certain degree of hyperthyroidism. This effect has, however, not been proved experimentally.

Friedgood and Cannon³ performed an end to end anastomosis of the right phrenic nerve and the distal segment of the cervical sympathetic trunk in cats, and in only 2 of the 9 animals in which it functioned were increased metabolism, tachycardia and restlessness observed on stimulation of the nerve. By cervical sympathectomy on 2 other cats with an adrenalectomy on the left side and denervation of the right adrenal on one of them, these authors proved that neither cervical sympathectomy nor denervation of the adrenals interferes with the characteristic effects of the thyrotropic hormone of the anterior lobe of the pituitary. Brock,⁴ as quoted by Colcock,⁴ observed that bilateral cervical sympathectomy in rabbits causes a decrease in metabolic activity fairly uniformly, but stimulation of the superior cervical sympathetic ganglion does not cause an increase in the basal metabolic rate.

Crile⁵ in studying the mechanism of exophthalmic goiter concluded that "in its entirety exophthalmic goiter is a pathologic physiology of the oxidation controlling system," that thyroidectomy is the standard operation and that in exceptional cases, if thyroidectomy fails, adrenal denervation may be indicated. He stated that the control of oxidation is the function of the brain, the thyroid gland and the adrenal-sympathetic system, and that the symptoms of exophthalmic goiter are largely those produced by stimulation of the adrenal-sympathetic system, namely, the rapid pulse, sweating, tremors, increased metabolism and flushed face. He described a patient desperately ill with exophthalmic goiter, unrelieved by Lugol's solution and considered an impossible operative risk, who

was relieved temporarily by spinal anesthesia and whose condition was improved by removal of the left adrenal gland until pneumonia caused death on the fifth day.

It would seem then from the great amount of investigation that has been carried out, that no one factor within itself is responsible for all types of hyperthyroidism. Nevertheless, it appears that those mentioned can operate, probably jointly in most instances, to bring about the symptom complex.

PATHOLOGY⁶

Smooth or Diffuse Nontoxic Goiter. (*Fig. 1*) This is the type of goiter which may be of endemic origin; it is the goiter of adolescence, or the colloid type. It is characterized by hyperplasia, which must be regarded as compensatory in character. There is a relative or absolute deficiency of iodine in the body, and the thyroid, in an effort to supply the iodine, undergoes hyperplasia. The gland is uniformly and diffusely enlarged and is soft; the cut surface is amber in color and presents a finely honeycombed appearance. Microscopic sections show evidence of both hyperplasia and involution. Many of the acini are greatly dilated so that the lining epithelium is flattened. They are filled with densely stained colloid. Evidence of previous hyperplasia may be seen in the form of spurs of epithelium projecting into the lumen of the acini.

Smooth or Diffuse Toxic Goiter. (*Fig. 2*) This type of goiter may present a picture typical of exophthalmic goiter or Graves' disease. The gland is usually enlarged. "The untreated thyroid is firm in consistency and of a dense, opaque, meaty or beefy appearance, very different from the translucent look of the colloid gland. In

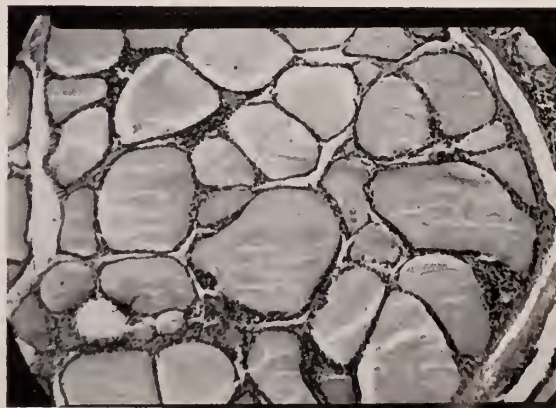


Fig. 1. Smooth or Diffuse Nontoxic Goiter (colloidal type)

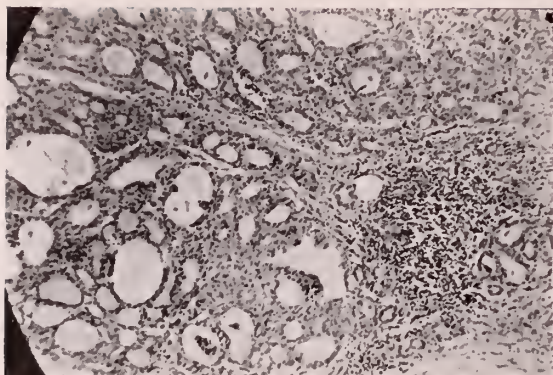


Fig. 2. Smooth or Diffuse Toxic Goiter (exophthalmic type).

those cases which have passed through a series of remissions and exacerbations, adenomata, that is to say, involution bodies may develop with a well-marked capsule."⁸ Microscopically the picture is one of diffuse hyperplasia and great glandular activity. The epithelium is tall and columnar, and there is rapid multiplication as confirmed by the presence of mitotic figures. The acinar spaces are increased in size as evidenced by great infolding of proliferated epithelium, which projects into the lumen in the form of papillary processes. After administration of iodine these papillary processes of epithelium diminish in size and recede. In other forms there may be no infolding or papillary processes. The colloid has a vacuolated appearance. As hyperplasia gives way to involution, the stroma of the gland becomes thickened.

Nodular Goiter. (Figs. 3 and 4) Nodular goiters are usually classified as colloid and fetal adenomas. The colloid type, according to Boyd,⁶ is usually a localized enlargement resulting from hyperinvolution confined to one lobule or a group of lobules. The fetal type is probably a true tumor usually single in number and arising possibly from fetal cell rests. Either type may be toxic or nontoxic. In attempting to distinguish between the two types, Boyd,⁶ quoting Graham,⁶ stated that "there are no anatomical, histological, chemical or pathological features of adenomata which could form a basis of distinction between toxic and non-toxic goiter," and again, "the explanation of the hyperthyroidism is to be sought not in the adenoma but in the surrounding gland, which may or may not show the hyperplastic process originally responsible for the formation of the adenoma." The gross appearance is that of many nodules with evidence of degeneration and cystic formation, or that of a single tumor, fetal in

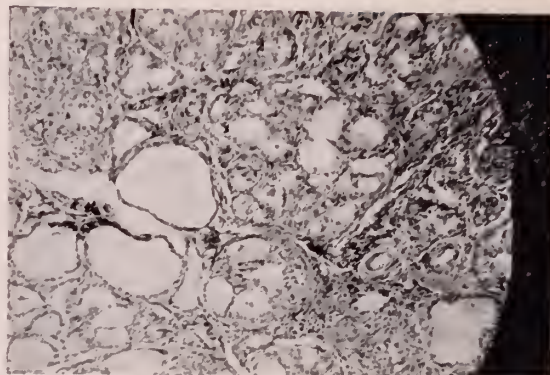


Fig. 3. Nodular Nontoxic Goiter (nontoxic adenoma, showing some areas of hyperplasia or toxicity).

type, which is grayish and dense. The microscopic appearance of the colloid type is made up of colloid-filled acini lined with low or flattened epithelium, surrounded by a fibrous capsule. There may be areas of active hyperplasia which exert pressure on the surrounding acini, causing them to be greatly compressed. The toxicity of the goiter depends on the presence or absence of areas of hyperplasia outside of the adenoma. In the fetal type of adenoma the acini are small and are supposed to be derived from fetal cell rests in the interacinar parenchyma. The lining cells are cuboidal in type and may contain colloid. Boyd⁶ was of the opinion that it is a mistake to draw a fundamental distinction between the colloid and fetal types of adenoma. It should be remembered, as has already been stated, that most goiters are of a mixed type, that is a colloid type with adenomatous changes, toxic and nontoxic.

BLOOD IODINE

Recent studies on the iodine content of the blood in relation to hyperthyroidism have been of extreme interest and may result in a definite method of foretelling the results to be obtained

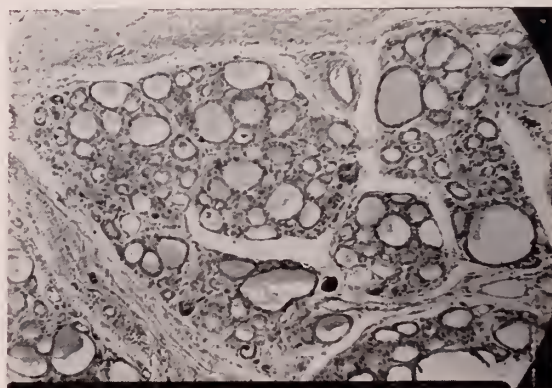


Fig. 4. Nodular Toxic Goiter (toxic adenoma)

by operation. The normal content of iodine in the blood as worked out by various investigators⁷ averages from 6.6 to 12 gammas per hundred cubic centimeters. Cattell and Perkin⁸ pointed out that the level tends to be elevated in cases in which symptoms of hyperthyroidism have been present for nine months or less, and that after there have been symptoms for one year or longer, the level is generally within normal limits. These authors studied 256 cases after operation, dividing them into three groups. In the cases in which there was a preoperative elevation of the level of iodine in the blood, there was little recurrence, while in those with a normal preoperative level recurrence was greatest. They strongly urged a more radical subtotal thyroidectomy in all cases in which the preoperative level is normal.

It must be added here that the laboratory procedure for the determination of the content of iodine in the blood is complicated and delicate. Although recently improvements have been perfected,⁹ the test does not yet have clinical application except in a few of the large clinics.

DIAGNOSIS

Diagnostic indications of hyperthyroidism vary from those of the evident type of toxic goiter, such a typical exophthalmic goiter with ocular signs, sweating, tremor, loss of weight, weakness, tachycardia, emotional instability and increase in metabolism, to those of the less obvious or borderline type.

The two main types of toxic goiter according to the classification previously mentioned are: (1) smooth toxic goiter, exophthalmic goiter or Graves' disease and (2) nodular toxic goiter, toxic adenoma. According to Thompson,² Plummer² attempted to differentiate between exophthalmic goiter and toxic adenoma on the basis of function. Most workers have concluded, however, that the several types are one and the same, there being merely a difference in the degree of hyperactivity. Rienhoff¹ in discussing clinical varieties stated: "In the light of our increasing knowledge of histogenesis and pathogenesis . . . it may be said that many of the confusing divisions . . . merely represent different stages or degrees of hypertrophy or hyperplasia or of involution in the disease cycle. However, the clinical course may be short and rather severe such as with exophthalmic goiter, or it may take on a more chronic or less fulminating type course, which is more or less typical of toxic adenoma."

The signs and symptoms of hyperthyroidism are more or less well known to all physicians. The nodular or diffuse goiter, which is apparently nontoxic, should be studied by (1) determining the level of metabolism and then by (2) observing the effect of iodine on this level. Neurocirculatory asthenia, emotional disturbances from other causes, acromegaly, pulmonary tuberculosis and hypertension must be differentiated from hyperthyroidism. Acromegaly and pulmonary tuberculosis should, as a rule, be more or less evident. As pointed out by Rienhoff,¹ "no matter how early or how mild, hyperthyroidism is always accompanied, for a time, by perfectly definite clinical signs and symptoms, although they may be very few and evasive." Thus the need for a carefully taken history and a thorough clinical examination is evident. Tachycardia, dyspnea and an elevated basal metabolic rate may be observed in hypertension. In cases of this type hyperthyroidism should not be diagnosed without the presence of other signs. The basal metabolic rate in cases of neurocirculatory asthenia is usually normal.

TREATMENT

Methods of treating toxic goiter are (1) medical, (2) roentgenologic and (3) surgical. Medical treatment¹⁰ of hyperthyroidism is reserved for a few carefully selected cases in which long-continued use of iodine constitutes adequate treatment. Smith and Stenstrom¹¹ claimed a return to normal in from 76 to 84 per cent of their cases treated by roentgen irradiation from 1926 to 1936 and concluded that it is the most rational method of treatment. Most authorities, however, were of the opinion that results are too long delayed and too uncertain for this form of treatment to be used routinely.

Indications for Surgery. In my opinion in all forms of toxic goiter a subtotal thyroidectomy is indicated except in a small number of cases in which surgery is contraindicated. The tendency of nontoxic nodular goiter to become toxic, or malignant, is sufficient cause for operation. In many cases of this type, however, the patient exhibits symptoms of nervousness, weakness, fatigability, palpitation and loss of weight, although the basal metabolic rate may be normal. Kappes¹² raised the question of the presence of a cardio-toxic condition in these cases and concluded that all forms of nodular goiter should be treated surgically.

Thompson² stated that it is unwise to operate when (1) the patient fails to gain or is losing weight, (2) emotional instability and muscular weakness are pronounced, (3) the basal metabolic rate is $+60$ per cent or higher, (4) the disease is increasing in severity, (5) a period of less than two weeks has elapsed since an infection of the upper part of the respiratory tract subsided and (6) cardiac decompensation is present. Roentgen therapy is usually indicated under these circumstances until improvement warrants surgery.

Preparation of the Patient. The preoperative preparation of the patient with toxic goiter should be carried out with the consultation and aid of the internist. The treatment of patients with cardiac decompensation and diabetes complicating toxic goiter rightfully should be directed by the internist, and these conditions will not be discussed here other than to say that they must be controlled before an operation can be undertaken. My routine for cases of this type is as follows:

1. **Iodine Therapy:** From 10 to 15 drops of compound solution of iodine (Lugol's solution) is administered three times daily for two or three weeks, or until the maximum benefits have been derived as evidenced by the reduction of metabolism, slowing of the pulse rate and stability of the emotions.

2. **Diet:** A diet containing 4,000 or 5,000 calories is ordered. A 10 per cent solution of dextrose in normal saline is given intravenously if great hepatic damage is suspected. The administration of vitamins A, B and C, or a diet rich in these vitamins, seems advisable. Womack¹³ stated that the most important effect of vitamin A is related in some way to the metabolism of the liver and particularly to the metabolism of glycogen. It has been shown experimentally that the addition of the vitamin B complex results in a greater gain in weight during the preoperative period.¹⁴ Vitamin C is probably of less importance.

3. **Rest in Bed:** If the disease is particularly severe and associated with signs of cardiac decompensation, absolute bed rest is required. If less severe, bath room privileges are allowed the patient. Rest in bed includes freedom from emotional disturbances, and barbiturates are administered if needed.

4. **Immediate Preoperative Preparation:** The period of hospitalization preceding surgery is especially important. In addition to rest, diet, the

administration of fluids and iodine, and careful laboratory examinations, the benefits derived from the practice of deceiving the patient about the exact date of the operation are not to be discounted. The methods used are so well known that they need not be described here.

Surgery. At the operation one should remove as much of the gland as seems consistent with good judgment. Most authorities advocate the more radical type of operation in an effort to prevent recurrence. Postoperative myxedema may be treated with desiccated thyroid and is, therefore, the lesser of two evils when compared to recurrence. The decision as to the extent of removal should be based on the response to preoperative preparation and the findings at operation. The patients who respond more slowly to iodine medication should have a more radical operation if the physical condition permits. In cases of nontoxic nodular goiter usually a subtotal thyroidectomy should be performed as small nodules may be overlooked. One should guard against leaving too much tissue at either pole and overlooking retrotracheal or substernal tissue.

Postoperative Care. The intravenous administration of a 5 or 10 per cent solution of glucose, the giving of oxygen when needed, sedation, close observation for complications, continuation of iodine therapy for from seven to fourteen days and allowing the patient to be up in a wheel chair as soon as practicable are postoperative procedures.

The cases described are typical and illustrative:

REPORT OF CASES

Case 1.—R.F.S., a white man aged 46, when first seen on May 25, 1940, gave a history of dyspnea, nervousness and loss of weight beginning in December 1939. On Feb. 13, 1940, he was forced to go to bed, where he remained for five weeks under a physician's care, being treated for cardiac trouble. He had lost 60 pounds during the six months' period despite a good appetite.

On examination his weight was 125 pounds; the pulse rate was 100, and the blood pressure was 128 systolic and 80 diastolic. Tremor, moist skin and rather great cardiac enlargement with a loud to and fro murmur over the entire precordium were noted. The basal metabolic rate was $+45$ per cent on two occasions. There was no exophthalmos; the thyroid was firm and only slightly enlarged. The Kahn test gave negative results.

A diagnosis of hyperthyroidism with myocarditis was made. The patient was advised to have a thyroidectomy. While discussing the operation he became extremely nervous and exhibited a great fear of surgery.

Bed rest for three weeks with the administration of Lugol's solution, 15 drops three times daily, continuation of digitalis therapy, the administration of calcium lactate and a diet high in calories resulted in a reduction of the pulse rate to 80, a gain in weight of ten pounds,

less nervousness, great general improvement and a feeling of well being. The patient had refused operation; so he was referred to Dr. J. J. McGuire for roentgen treatment. From June 15 to August 3 he received weekly roentgen irradiations over the thyroid in single doses of 200 r at 220 kv. for a total dose of 1,600 r.

On June 27 he returned to light work and has since then enjoyed good health. The basal metabolic rate on August 14 was -10 per cent. His present weight is 160 pounds. He has no dyspnea and he carries on his regular work. There has been no recurrence of the disease within a period of twelve months. This case is presented to show the possibilities of roentgen irradiation.

Case 2.—Mrs. J. S. E., a white woman aged 40, came for examination Aug. 17, 1940, complaining of goiter, weakness, nervousness and loss of weight. She had had a slight enlargement of the thyroid since she was 16 years of age, but had noticed a rapid increase in its size in 1937, at which time she had suffered a nervous breakdown. Her physician had prescribed 10 drops of iodine three times daily, increasing the dose to 27 drops three times daily for two or three weeks. Improvement and gain in weight had followed. In June 1940 she had again become nervous and had lost weight. Advised by her physician to have the goiter removed, she had again taken iodine, and after bed rest for three weeks, she had improved, but would not submit to surgery. She had five children, all living and well.

Physical examination revealed a somewhat nodular enlargement of both lobes and the isthmus of the thyroid to about three times the normal size. The temperature was 99 F., the pulse rate was 120 and the blood pressure was 120 systolic and 80 diastolic. The skin was moist; there was pronounced tremor and slight exophthalmos. The heart was somewhat enlarged and there was a mild systolic murmur at the apex. The basal metabolic rate on June 1 had been + 53 per cent; the weight 109 pounds.

After treatment consisting of bed rest and the taking of Lugol's solution, digitalis and a diet high in calories, the basal metabolic rate was + 37 per cent on September 5. On September 6, under local anesthesia and with a preoperative diagnosis of toxic adenoma of the thyroid, a subtotal thyroidectomy was performed. Recovery was uneventful except for the occurrence of extra systoles, which persisted for two weeks. The patient was discharged from the hospital September 11 feeling much improved and with a pulse rate varying from 70 to 80.

The pathologic findings were toxic hyperplasia with areas showing adenomatous formation. The appearance of other areas suggested the previous administration of iodine. The diagnosis was toxic adenoma of the thyroid.

By October 19 the patient weighed 120 pounds and was enjoying good health, free from her previous symptoms. The basal metabolic rate Sept. 15, 1941, was + 2 per cent, and the weight was 117 pounds.

Case 3.—Mrs. M. J. H., a white woman aged 25, consulted me on Aug. 7, 1941, complaining of goiter, weakness, nervousness, crying spells and sleeplessness. She had noticed a swelling in the neck since she was about 12 years of age, which had seemed to enlarge rather rapidly during the last year. Her appetite had been good, but she had been unable to gain in weight, although there had been no loss of weight.

Physical examination revealed slight exophthalmos and moderate enlargement of both lobes and the isthmus of the thyroid, which was smooth and firm to palpation. There was slight bruit, the pulse rate was 130, and the blood pressure was 130 systolic and 70 diastolic. The skin was of fine texture and moist. There was a great degree of tremor, and the basal metabolic rate was + 50 per cent. A diagnosis of exophthalmic goiter was made.

After two weeks of bed rest and treatment with Lugol's solution, 15 drops three times daily, calcium lac-

tate, 30 grains daily, and a diet high in calories, there was general improvement in the patient's condition and a gain of 2 pounds in weight. The pulse rate was 100, and the basal metabolic rate was zero. On August 27 subtotal thyroidectomy was performed with the removal of about 90 per cent of the gland.

Pathologically, examination of the sections of the thyroid revealed a diffuse hyperplasia with a majority of the acini completely or partially filled with colloid. Other areas showed smaller acini, which contained no colloid, and the lining epithelium was columnar in type. Other areas showed an aggregation of lymphoid cells, which suggested a previous administration of iodine.

The postoperative course was uneventful. The patient was discharged from the hospital on September 1.

SUMMARY AND CONCLUSIONS

A discussion of the classification, etiology, pathology, blood iodine, diagnosis and treatment of hyperthyroidism has been presented. Personal observation and the experience of others lead to the conclusion that in all cases of hyperthyroidism and nontoxic nodular goiter the patient should undergo subtotal thyroidectomy with the exception of a few selected cases reserved for roentgen irradiation or medical treatment.

BIBLIOGRAPHY

1. Rienhoff, W. F.: Diseases of the Thyroid Gland, Dean Lewis System of Surgery, vol. 6, Ch. 1, Hagerstown, Md., W. F. Pryor Co., 1933.
2. Thompson, W. O.: Thyroid Dysfunctions and Their Treatment, J.A.M.A. **117**: 441-450 (Aug. 9) 1941.
3. Friedgood, H. B., and Cannon, W. B.: Autonomic Control of Thyroid Secretion, Endocrinology **26**: 142-152 (Jan.) 1940.
4. Colcock, B. P.: Review of Pathogenesis and Surgical Treatment of Thyroid Diseases, Surgery **10**:336-357 (Aug.) 1941.
5. Crile, G.: The Mechanism of Exophthalmic Goiter, West. J. Surg. **47**: 243-248 (May) 1939.
6. Boyd, W.: Pathology of Internal Diseases, Philadelphia, Lea and Febiger, 1935.
7. Means, J. H.: The Thyroid and Its Diseases, Philadelphia, J. B. Lippincott Co., 1937.
8. Cattell, R. B., and Perkin, H. J.: Recurrent Hyperthyroidism; Likelihood of Recurrence in Relation to Preoperative Blood Iodine Level, West. J. Surg. **47**: 55-61 (Feb.) 1939.
9. McClendon, J. F., and Rice, C. O.: Hormone Iodine in 5 Cubic Centimeters of Blood in Relation to Goiter, Tr. Third Internat. Goiter Conf. & Am. A. for Study of Goiter, pp. 400-406, 1938.
10. Means, J. H.: Medical Aspects of Toxic Goiter, West. J. Surg. **47**: 62-64 (Feb.) 1939.
11. Smith, M., and Stenstrom, K. W.: X-ray Therapy in Diffuse Hyperplasia of Thyroid, Tr. Third Internat. Goiter Conf. & Am. A. Study Goiter, pp. 527-532, 1938.
12. Kappes, W. C.: Nodular Goiter, South. Med. J. **34**: 517-520 (May) 1941.
13. Womack, N. A.: Preoperative and Postoperative Treatment of Toxic Goiter, Arch. Surg. **40**: 1123-1132 (June) 1940.
14. Frazier, W. D.; Brown, R. B., and Vars, H. M.: Influence of B. Complex and Certain of Its Components on Experimental and Clinical Hyperthyroidism, Tr. Am. A. Study Goiter, pp. 247-255, 1939.

OPPORTUNITIES FOR SPECIAL WORK IN STUDENT PILOT TRAINING WITH SPECIAL REFERENCE TO AIR SICKNESS

RICHARD C. CUMMING, M. D.
LAKELAND

The eyes of the man in the common walk of life, as well as those of the men actually building our defense, are turned toward the air, and it behooves the medical profession today to give every aid possible that contributes to the safety of flying and the efficiency of training. Facts brought out in the training of young pilots in the Army today may aid in the safety, as well as the comfort, of those who fly tomorrow, whether on business or for pleasure.

Certainly no better field can be found for study of normal and abnormal reactions than that comprised of the hundreds of young men now in training to become the pilots of our air forces. They are the cream of young American and British manhood. The rigid educational, moral and physical requirements eliminate from this group the mentally and physically unfit.

The intensive training program of the Army has been in force long enough now to afford numerous opportunities for investigation and to obtain the groundwork for further observations. No matter how minor the problem, if it affects a certain percentage of each group and thus detracts from the efficiency of students in training, whatever can be done to aid in clearing up the difficulty should be the concern of the medical department.

There are a number of factors to be considered in any problem of this nature, including primarily the student pilot, his former environment, his previous training, his aim and determination. The instructor comes in for a good share of credit or blame in the success of the student. Under the present well working plan of civilian instruction, with military supervision, the Air Corps pilot and all those connected with the military department are of vital importance. The medical department, always concerned with his welfare, plays a definite part in whether or not the student makes good. Finally, the attitude of the community in which the training center is located, and especially the moral influences

and actual interest in the training mean much in a successful program.

With reference to the local civilian interest, I believe that communities should recognize the class of young men in the Air Corps as such a fine representative group of young America and Britain that all hospitality and assistance possible should be extended to them. This attitude will react in an excellent way on the morale of the students and is a small enough bit for the community to do in this most vital part of our defense.

So much has been said and written about almost every conceivable ailment of man and all sorts of important and minor matters in medicine that I hesitate to ask for time and consideration in the matter of a simple complaint. And yet, the contact I have had during the last year with some six hundred American lads and three hundred British student pilots has convinced me that the little details in the routine of these fine young men often lead to their success or elimination in the matter of pilot training.

Air sickness has long been taken for granted. Some students are affected by it; some are entirely free from its upsetting influence. A varying percentage of students in each class not only suffers, but a small group of these is definitely so concerned that air sickness is a major factor in elimination or "washouts." These men are carefully selected, hand-picked, and they present fine systems and good physical development. In the case of the American lads, each man is fully questioned as to a history of sea, swing, train, car or air sickness. A history of an isolated instance of upset may not disqualify, but must be considered along with the other details of the history and the results of examination.

In the case of British lads, aside from knowing that they are carefully selected, I am not sure how much weight is placed on a history of gastric upsets. I have found some instances of British students who give a definite history of severe seasickness and of car, train or swing sickness. A history of actual air sickness is rare. Whether, in their anxiety to fly, these young men will not admit having been upset in the air, or whether few if any have ever experienced trouble is a question. A good number of the student pilots have never been in the air, or have only been up for a brief ride, most often in a closed plane.

It is well to note here that, as with many other

Major, Medical Corps, Air Corps Training Detachment, Lakeland School of Aeronautics.

Read before the Fifth Annual Meeting of the North Central Medical District, Gainesville, Oct. 3, 1941.

problems in which human subjects are the objects of investigation, there are numerous hindrances to the gathering of data. The rapid pace of training, the anxiety of the lads to make good in the course, the lack of understanding that helpfulness rather than curious questioning is the motive for such investigation, all come into play. I have received help from flight commander and instructor, and usually full cooperation from the affected subjects. But it is often the case that reports come tardily, and the students are hesitant to come to me about upsets. Observations and what conclusions are possible, therefore, must be interpreted with due consideration for these factors.

I find that the environment and home training of the student pilot are important. If he has been used to athletics and an outdoor life, his physical condition as well as the mental, is better prepared for the strain of his pilot training. Certainly those students who have had previous work in the air are less apt to experience illness or upset in their flying. The question has often arisen whether or not the applicant should be given at least one ride in the type of plane used for training. Surely, numerous applicants would hide their feelings, believing they would make good if given a chance, even if they experienced some upset on the trial flight.

Pilots, particularly the older ones, tend to minimize the fact that a certain percentage of students becomes ill on the first few flights, or later on acrobatic training. In this intensive course of training, however, it does not pay to have even a few periods of instruction spoiled by sickness. Then too, the psychologic reaction is often bad on the student who thinks he is doing well and is suddenly overcome with nausea and even vomiting, with perhaps a severe headache later. The ill feeling may definitely interfere with his ground school studies and other work.

I believe that here the influence of the instructor should be emphasized. To the student he is little short of a god, able to do the things which are just about perfect. That reverence is often justified, but there is no reason why the position should be overdone. The instructor is human, and whether his disposition is good, his reactions pleasant and his instructions clear depends a great deal on his personal health and attitude. He should study each student as a human being, to whom he may give not only his instructions, but a part of his real self as an aviator. He passes on a heritage rich and most

valuable to every successful student.

All these facts may seem evident, but in an ever changing group, where contact with the student may be only for a few weeks for each course, too much emphasis cannot be placed on the attitude of the student to his instructor and the constant interest of the instructor in his student. I have requested that the instructors report to me any student experiencing nausea, or any disturbance that seems to slow up or affect his work. I do not believe the matter of air sickness should be overemphasized, but recognition and corrective measures may do much to eliminate this condition as a cause of loss of time, or, indirectly, as a cause of "washouts."

During the last twelve months, in contact with ten classes of cadets, I have been able to observe a number of cases of minor, as well as major, air sickness. By minor, I mean those cases that rather quickly cleared up on passage of time, use of corrective measures, or simply the conquering of the upsets by the student with that same determination that makes a good pilot. The major cases, few in number even among a group of some nine hundred cadets, were limited to those who continued to suffer from nausea, headaches, or other upsets, and were eliminated from flying after a varying length of time, with air sickness probably a real factor in their failure to make good.

Observations particularly applying to the British students include such physical conditions as complete upper or lower dental plates, or both, often poor condition of the teeth with even incisors or other front teeth missing, lack of familiarity with machines for numbers have never driven automobiles, the change of climate, differences in foods and their preparation, and many times definite indiscretions in eating. It is readily seen that any one of these, or a combination of several of them, could be the cause of air sickness.

Some of these causes can be corrected, but often the lack of time for such corrections as bad or missing teeth gives little hope of immediate success. When possible, however, I have had necessary dental work done, even on students eliminated from flying, knowing that in whatever other branch of the air service they may be placed, the trouble may persist. Again, when the climate is concerned, often by the time the student has become accustomed to the change from his home climate to that of Florida, his progress has been so retarded that elimination

from flying is the result. Directions as to eating and adjustments in diet all help. It is the early days that are most important, and I sometimes feel that in order to do our best in these cases, we will have to start before flight training begins, even weeks before. Thus students could be conditioned and made more ready for the strain of the intense courses.

When a student, often sent over from the flying line, reports to me, I check over a routine history, which includes his previous flying experience, often little or none at all, his work prior to training, his likes and dislikes as to foods, his appetite, sleep, and regularity of elimination before and after entering the service. Then I question as to his illness, the time of its occurrence, the height at which it occurred, what movements of the plane brought it on, his feelings after landing, headaches and further upsets. I question him as to the adjustment of his safety belt and whether his goggles fit too tightly. If he has been in training long, I check his records to learn if he has been tense or erratic in his flying. All of this information bears on the case in question, and I often find that the student believes he knows the cause, or he reveals the cause of his upset in answering the questions asked. If he is nervous or seems still rather ill when he first reports, I have him rest awhile and talk to him later.

Constipation, or irregularity of elimination, has frequently proved to be a factor in air sickness. Change of environment is definitely a reason for it. The use of a mild laxative, such as is now indicated, has often cleared up this trouble. I prefer not to use the compound cathartic pill or even magnesium sulfate because of their stronger action. I have found the use of a mild laxative efficient when given each morning before breakfast for three days and then twice a week for as long as indicated. I use this same sort of preparation frequently when "sluggishness and listlessness" indicate the need for stimulation of the gallbladder and liver. No complaints from the students as to griping or upsetting effect and generally good results lead me to feel that this is a satisfactory preparation.

Improper eating, especially eating a large meal just before going up for a flight, coupled with the accompanying tenseness and newness of the air work, often leads to illness. I advise the ingestion of no fats, and little heavy food for the meal just before flying, and usually the results are encouraging. Mild digestive disturbances al-

so seem to cause upsets in flying. In these cases again a mild laxative is useful, as well as regulation of the diet. Cooperation of the steward helps no little in these cases. He can aid in choosing the types of diet used, and at my station this last year, I have had excellent assistance from the steward at all times.

Not all, by any means, of the students who become "washouts" admit having had any form of upset of the type characteristic of air sickness, but the majority of them have had some physical upset and will describe it freely on questioning. As a rule, a great number of those students who have trouble early in the course, or even in the acrobatic stages, get entirely over the upset and go on to finish their work. I have, interestingly enough, encountered several instructors, with many hours in the air to their credit, who readily admit that continued acrobatics will cause a definite upset, even to nausea and vomiting.

A sympathetic investigation of each case with efforts to clear up the cause or causes should be the purpose of the physician with the Air Corps. As student, instructor and physician work together, a great deal can be done. After all, these students often present problems similar to those found in private practice; in fact, if these problems are solved now, the future for many persons in flying will be brighter.

In conclusion, I believe that no problem which affects the mental and physical well-being of the student pilot should be neglected. Small factors may prove the straws that tip the scales against the lad so anxious to make good in training. The instructor should be sympathetic and understanding. The medical department should be alert to the correction of the cause, whether it be constipation, improper eating, digestive disorder, too tight a safety belt, too tense a position in the plane, or anything that can be straightened out for the student. The student pilot should be encouraged to cooperate fully from the beginning.

This plan cannot fail to lead to better feeling and a finer efficiency in relations between instructor, student and medical officer. As air sickness and other factors that cause "washouts," are removed, there will be a happier and better group of student pilots and a greater percentage of successes. Finally, these efforts are of importance now, and the facts learned may well have no little bearing on the future of aviation, affecting countless numbers who wish to fly as pilots or as passengers in the air of tomorrow.

FLORIDA MEDICAL ASSOCIATION OFFICERS AND COMMITTEES

OFFICERS

GILBERT S. OSINCUP, M.D., President.....Orlando
EUGENE G. PEEK, M.D., President-Elect.....Ocala
L. W. BLAKE, M.D., 1st Vice Pres.....Bradenton
LOYD J. NETTO, M.D., 2nd Vice Pres.....W. Palm Beach
H. A. WALKER, M.D., 3rd Vice Pres.....Miami Beach
SHALER RICHARDSON, M.D., Sec'y-Treas.....Jacksonville

MANAGING DIRECTOR

STEWART G. THOMPSON, D. P. H.....Jacksonville

BOARD OF GOVERNORS

J. ROCHER CHAPPELL, M.D., Chm...AL-43.....Orlando
JOHN R. BOLING, M.D., C-46.....Tampa
FREDERICK K. HERPEL, M.D., D-43.....W. Palm Beach
LOUIE M. LINBAUGH, M.D., B-44.....Jacksonville
WALTER C. PAYNE, M.D., A-45.....Pensacola
J. SAM TURBERVILLE, M.D., PP-43.....Century
WALTER C. JONES, M.D., PP-44.....Miami
GILBERT S. OSINCUP, M.D. (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville
STEWART G. THOMPSON, D. P. H. (Advisory) Jacksonville

SCIENTIFIC WORK

HERBERT E. WHITE, M.D., Chm...B-43.....St. Augustine
CHARLES J. COLLINS, M.D., AL-43.....Orlando
DOUGLAS D. MARTIN, M.D., C-46.....Tampa
HOMER L. PEARSON, M.D., D-45.....Miami
JAMES H. POUND, M.D., A-44.....Tallahassee

LEGISLATION AND PUBLIC POLICY

H. D. VAN SCHAIK, M.D., Chm...AL-43 Jacksonville
HORACE A. DAY, M.D., B-45.....Orlando
WHITMAN C. MCCONNELL, M.D., C-46.....St. Petersburg
HENRY E. PALMER, M.D., A-44.....Tallahassee
JOSEPH S. STEWART, M.D., D-43.....Miami
GILBERT S. OSINCUP, M.D. (Ex Officio).....Orlando
SHALER RICHARDSON, M.D. (Ex Officio).....Jacksonville

MEDICAL EDUCATION AND HOSPITALS

WALTER A. WEED, M.D., Chm...AL-43.....Orlando
ROBERT D. FERGUSON, M.D., B-43.....Ocala
JOHN S. HELMS, M.D., C-46.....Tampa
JESSE N. McLANE, M.D., A-44.....Pensacola
CAYETANO PANETTIÈRE, M.D., D-45.....Miami Beach

PUBLIC RELATIONS

LEIGH F. ROBINSON, M.D., Chm...AL-43..Ft. Lauderdale
SIDNEY G. KENNEDY, M.D., A-43.....Pensacola
BAILEY B. SORY, M.D., D-44.....Palm Beach
JAMES L. STRANGE, M.D., B-46.....McIntosh
HARPER E. WHITAKER, M.D., C-45.....Tampa

NECROLOGY

GERRY R. HOLDEN, M.D., Chm...B-46.....Jacksonville
AUGUSTUS E. CONTER, M.D., A-43.....Apalachicola
GEORGE R. CREEKMOORE, M.D., C-44.....Brooksville
JULIAN L. HARGROVE, M.D., AL-43.....Bartow
GERARD RAPP, M.D., D-45.....Miami

MEDICAL POSTGRADUATE COURSE

TURNER Z. CASON, M.D., Chm...B-46.....Jacksonville
W. WELLINGTON GEORGE, M.D., D-44.....W. Palm Beach
FRANK D. GRAY, M.D., AL-43.....Orlando
ROBERT B. HARKNESS, M.D., A-43.....Lake City
DAVID R. MURPHEY, M.D., C-45.....Tampa

CANCER CONTROL

ALFRED G. LEVIN, M.D., Chm...D-45.....Miami
JAMES M. HOFFMAN, M.D., A-46.....Pensacola
HEWITT JOHNSTON, M.D., B-44.....Orlando
JOHN N. MOORE, M.D., AL-43.....Ocala
R. WYNN S. OWEN, M.D., C-43.....St. Petersburg

MEDICAL ECONOMICS

HARRISON A. WALKER, M.D., Chm...D-45 Miami Beach
HERBERT L. BRYANS, M.D., AL-43.....Pensacola
FRANCIS T. HOLLAND, M.D., A-43.....Tallahassee
EDWARD JELKS, M.D., B-44.....Jacksonville
JOSEPH W. TAYLOR, M.D., C-46.....Tampa

VENEREAL DISEASE CONTROL

ELIJAH T. SELLERS, M.D., Chm...B-43.....Jacksonville
ELMO D. FRENCH, M.D., D-45.....Miami
LEO C. GONZALEZ, M.D., AL-43.....Tampa
ALVIN L. MILLS, M.D., C-46.....St. Petersburg
JOE I. TURBERVILLE, M.D., A-44.....Century

INTERRELATIONSHIP

HENRY J. PEAVY, M.D., Chm...D-45.....Ft. Lauderdale
WILLIAM M. DAVIS, M.D., C-46.....St. Petersburg
DANIEL A. MCKINNON, M.D., AL-43.....Marianna
JOHN E. MAINES, JR., M.D., B-44.....Gainesville
RUFUS THAMES, M.D., A-43.....Milton

TUBERCULOSIS AND PUBLIC HEALTH

WILLIAM C. BLAKE, M.D., Chm...C-46.....Tampa
EARLSWORTH C. BRUNNER, M.D., D-45.....Miami
J. MAXEY DELL, JR., M.D., B-44.....Gainesville
DUNCAN T. McEWAN, M.D., AL-43.....Orlando
ROBERT G. NOBLES, M.D., A-43.....Pensacola

STATE CONTROLLED MEDICAL INSTITUTIONS

H. MASON SMITH, M.D., Chm...C-46.....Tampa
BENJAMIN F. BARNES, M.D., AL-43.....Chattahoochee
HARRY S. HOWELL, M.D., A-43.....Lake City
ROBERT T. SPICER, M.D., D-44.....Miami
ROLLIN D. THOMPSON, M.D., B-45.....Orlando

MATERNAL WELFARE

SAMUEL R. NORRIS, M.D., Chm...AL-43.....Jacksonville
LAURIE L. DOZIER, M.D., A-45.....Tallahassee
ISAAC M. HAY, M.D., B-43.....Melbourne
RALPH W. JACK, M.D., D-46.....Miami
W. WARDLAW JONES, M.D., C-44.....Dade City

CHILD HEALTH

GEORGE L. COOK, M.D., Chm...AL-43.....Tampa
THOMAS M. PALMER, M.D., B-44.....Jacksonville
WARREN W. QUILLIAN, M.D., D-45.....Coral Gables
COUNCIL C. RUDOLPH, M.D., C-46.....St. Petersburg
ALVYN W. WHITE, M.D., A-43.....Pensacola

CONSERVATION OF VISION

SHALER RICHARDSON, M.D., Chm...B-46.....Jacksonville
CARL E. DUNAWAY, M.D., D-44.....Miami
SHERMAN B. FORBES, M.D., C-45.....Tampa
HOLLIS C. INGRAM, M.D., AL-43.....Orlando
WILLIAM S. NICHOLS, M.D., A-43.....Lake City

ADVISORY TO WOMAN'S AUXILIARY

GEORGE C. TILLMAN, M.D., Chm...B-46.....Gainesville
LUTHER C. FISHER, M.D., A-43.....Pensacola
JOHN D. HAGOOD, M.D., C-44.....Clearwater
LAWRENCE C. INGRAM, M.D., AL-43.....Orlando
ARTHUR L. WALTERS, M.D., D-45.....Miami Beach

REPRESENTATIVES TO INDUSTRIAL COUNCIL

RICHARD H. WALKER, M.D., Chm...B-44.....Orlando
THOMAS H. BATES, M.D., AL-43.....Lake City
JULIUS C. DAVIS, M.D., A-43.....Quincy
R. RENFRO DUKE, M.D., C-45.....Tampa
FERDINAND A. VOGT, M.D., D-46.....Miami

COUNCILOR DISTRICTS AND COUNCILORS

W. DUNCAN OWENS, M.D., Chm...AL-43..Miami Beach
First—COURTLAND D. WHITAKER, M.D., 1-43 Marianna
Second—WILLIAM D. ROGERS, M.D., 2-44 Chattahoochee
Third—LUCIEN Y. DYRENFORTH, M.D., 3-43 Jacksonville
Fourth—MEREDITH MALLORY, M.D., 4-44.....Orlando
Fifth—LELAND F. CARLTON, M.D., 5-44.....Tampa
Sixth—S. EDGAR WATSON, M.D., 6-43.....Lakeland
Seventh—LLOYD J. NETTO, M.D., 7-43 West Palm Beach
Eighth—ELBERT McLAURY, M.D., 8-44.....Hollywood

MEDICAL PREPAREDNESS

EDWARD JELKS, M.D., Chairman.....Jacksonville
WALTER C. JONES, M.D.....Miami
GILBERT S. OSINCUP, M.D.....Orlando
SHALER RICHARDSON, M.D.....Jacksonville

A. M. A. HOUSE OF DELEGATES

EDWARD JELKS, M.D., Delegate.....Jacksonville
HERBERT L. BRYANS, M.D., Alternate.....Pensacola
(Terms expire Dec. 31, 1942)
MEREDITH MALLORY, M.D., Delegate.....Orlando
GEORGE M. DAWSON, M.D., Alternate.....West Palm Beach
(Terms expire Dec. 31, 1943)

BOARD OF PAST PRESIDENTS

WILLIAM P. ADAMSON, M.D., Chairman, 1920... Tampa
J. SAM TURBERVILLE, M.D., Secretary, 1940...Century
J. HARRIS PIERPONT, M.D., 1890, 1901, 1902...Pensacola
HENRY E. PALMER, M.D., 1909...Tallahassee
ROBERT H. MCGINNIS, M.D., 1915...Jacksonville
FREDERICK J. WALTER, M.D., 1918...San Diego, Calif.
WILLIAM E. ROSS, M.D., 1919...Jacksonville
H. MARSHALL TAYLOR, M.D., 1923...Jacksonville
JOHN C. VINSON, M.D., 1924...Tampa
JOHN S. McEWAN, M.D., 1925...Orlando
H. MASON SMITH, M.D., 1926...Tampa
JOHN A. SIMMONS, M.D., 1927...Arcadia
FREDERICK J. WAAS, M.D., 1928...Jacksonville
HENRY C. DOZIER, M.D., 1929...Ocala
JULIUS C. DAVIS, M.D., 1930...Quincy
GERRY R. HOLDEN, M.D., 1932...Jacksonville
WILLIAM M. ROWLETT, M.D., 1933...Tampa
HOMER L. PEARSON, M.D., 1934...Miami
HERBERT L. BRYANS, M.D., 1935...Pensacola
ORION O. FEASTER, M.D., 1936...St. Petersburg
EDWARD JELKS, M.D., 1937...Jacksonville
W. HENRY SPIERS, M.D., 1938...Orlando
LEIGH F. ROBINSON, M.D., 1939...Ft. Lauderdale
WALTER C. JONES, M.D., 1941...Miami

The Journal of The Florida Medical Association

Owned and published by Florida Medical Association, Inc.

EDITOR

SHALER RICHARDSON, M.D.

MANAGING DIRECTOR

STEWART G. THOMPSON, D.P.H.

ASSOCIATE EDITORS

SPENCER A. FOLSOM, M.D. *Orlando*
FRANK C. METZGER, M.D. *Tampa*
MILLEN A. NICKLE, M.D. *Clearwater*
HOMER L. PEARSON, M.D. *Miami*
J. H. POUND, M.D. *Tallahassee*
W. McL. SHAW, M.D. *Jacksonville*

COMMITTEE ON PUBLICATION

HERMAN WATSON, M.D., Chairman. *Lakeland*
SHALER RICHARDSON, M.D. *Jacksonville*
ARTHUR L. WALTERS, M.D. *Miami Beach*

ABSTRACT DEPARTMENT

KENNETH A. MORRIS, M.D., Chairman. *Jacksonville*
THEODORE F. HAHN, M.D. *Deland*
FRAZIER J. PAYTON, M.D. *Miami Beach*

MEMBERS IN ARMED SERVICES

A list of our members in military service has been compiled in the headquarters office, through the secretaries of the county medical societies. It was planned to publish the list in this Journal. However, a communication dated May 27 has been received from the War Department, Office of the Surgeon General, Washington, D. C., in which this paragraph is included:

Even though you specify names only and not addresses, it is not in accord with the general policy of the War Department and it is believed that it would be better at the present to omit this feature.

The official list will be kept up to date so that it may be published in its entirety at the close of the war.

MEDICAL DISTRICT MEETINGS

The Northwest Medical District meeting, scheduled for Thursday, October 8, will be held in Tallahassee. This meeting was originally slated for Panama City but, owing to a shortage of physicians there, Councilors Whitaker and Rogers transferred it to Tallahassee.

There will be four district medical meetings in October, as the number of medical districts has been reduced from six to four. Anyone interested in the new boundary lines of the medical and councilor districts is requested to refer to the May Journal where an outline map may be studied.

A schedule of meeting places and dates is listed below.

A—Tallahassee, October 8

B—Ocala, October 15

C—Sarasota, October 22

D—Miami, October 29

ANNUAL TUBERCULOSIS CONFERENCE

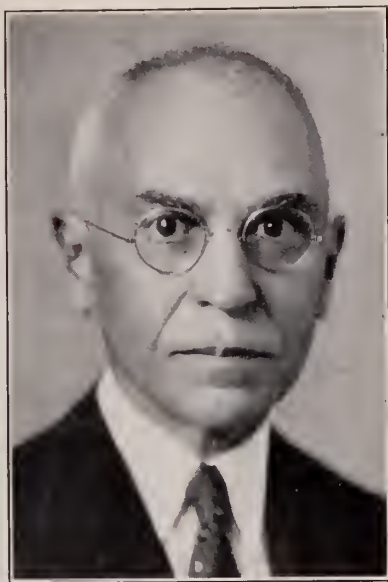
Evidence of an increasing trend in tuberculosis in the civilian population was presented to private physicians, health officers, nurses, tuberculosis workers attending the Annual Conference of the Florida Tuberculosis and Health Association in Tampa, May 18 and 19.

Dr. Esmond R. Long, director of the Henry Phipps Institute, Philadelphia, was the principal out-of-state medical speaker. With a wealth of information, statistical and scientific, Dr. Long impressed the Conference with the need for strict application of modern information in the diagnosis and control of tuberculosis. He pointed out that mass migrations due to military and industrial concentrations are in part responsible for the upward trend in tuberculosis in the civilian population. He pointed to strain, stress, nutritional deficiencies, as well as unhospitalized open cases as a part of the picture.

Dr. Alexandre Bruno of Paris, former director of the Rockefeller Foundation Commission in France, told of tuberculosis in France during and after World War No. 1. Dr. Warren W. Quillian, Coral Gables, spoke on "Nutrition and Tuberculosis," illustrating his talk with slides.

Mr. Frank Kierman, director of New York City Tuberculosis and Health Association, based his talk on a survey made by Dr. Godias G. Drolet, statistician for the association. The figures revealed that in a number of large southern cities, tuberculosis has already shown a marked increase.

Members of the Florida Medical Association appearing on the program were, in addition to Dr. Quillian: Dr. Gilbert S. Osincup, Orlando, president, Florida Medical Association; Dr. Arnold S. Anderson, St. Petersburg; Dr. R. D. Thompson, superintendent and medical director, State Tuberculosis Sanatorium; Dr. Lynne E. Baker, director, Division of Tuberculosis, State Board of Health; Dr. T. Z. Cason, Jacksonville, and Col. W. D. Webb, medical director, Selective Service Board, St. Augustine.



FRANK E. BURCH, M. D.

The Florida Society of Ophthalmology and Otolaryngology was greatly honored by having Dr. Frank E. Burch of St. Paul, Minn., as its distinguished guest of honor at the fourth annual meeting of the Society, held in Hollywood, April 12 and 13. Dr. Burch is a recent past president of the American Academy of Ophthalmology and Oto-Laryngology and has served as president of numerous other medical organizations. Since 1904 Dr. Burch has specialized in ophthalmology and since 1926 he has been chief of the department of ophthalmology of the University of Minnesota. During the first World War he rendered notable service as a major in the Medical Corps of the United States Army. He has attained eminence also as the author of many scientific articles.

At the scientific session on April 12 Dr. Burch presented an address on "Cataracts" and that night he conducted a round table discussion. The subject of the address he presented at the scientific session on April 13 was "Glaucoma."

PHYSICIANS ARE URGED TO SEEK ARMY COMMISSIONS IMMEDIATELY

Physicians who have selected the Army as first choice in their enrolment with the Procurement and Assignment Service should not wait to be called on by state recruitment teams but should apply for immediate commissioning to the state representatives of the Procurement and Assignment Service, The Journal of the American Med-

ical Association advised in an editorial in its May 16 issue. The Journal stated:

Under the heading of Medicine and the War in this issue of The Journal appears an official statement by General Hershey, director of the Selective Service System, relative to the recruitment of physicians for the United States Army Medical Corps. This statement, addressed to the state directors of the Selective Service System, discusses the new plan, already described in The Journal, whereby teams for the recruitment of physicians are established in the various states. Following a meeting in Omaha on May 8 the plan was extended also to all states west of the Mississippi River. In each state representatives of the Office of the Surgeon General of the Army, of the Adjutant General's Office and the state representative of the Procurement and Assignment Service for Physicians, Dentists and Veterinarians will function as a team for the recruitment of physicians. They have authority to issue commissions in the grades of lieutenant and captain, immediately following physical examination. This step has been necessary because of the shortage now prevailing of five thousand physicians for the U. S. Army Medical Corps. No doubt physicians in more than adequate numbers will respond.

Never has there been any question of the patriotism of the medical profession! Any delay that has occurred up to now in enrolment has been associated with the desire of every physician to serve in the capacity for which he is best suited. The various technics that have been developed for making such determination have apparently resulted in some delay by physicians in making themselves available prior to receipt of the enrolment form and questionnaire now in the hands of every physician. Already many thousands of these enrolment forms have been received in the office of the National Roster. The names of physicians who select Army as first choice will no doubt soon be supplied to the state recruitment teams; they may then call on such physicians for immediate action. However, physicians must not wait for such call; they are needed now. They may apply for immediate commissioning to the state representatives of the Procurement and Assignment Service.

The circular issued by General Hershey calls particularly to the attention of the local boards of the Selective Service System the type of consideration to be given to claims by physicians for deferment because of dependency. Physicians who are commissioned as officers will, of course, have much more difficulty in sustaining a claim based on dependency than would those who are enlisted in ranks below that of lieutenant or captain.

As experience has developed, it becomes more and more apparent that many of the difficult problems associated with the recruitment of physicians are being solved. By a decision now prevailing, physicians who are not citizens may enlist in the United States Army and after three months of service may be made citizens. If the situation concerns a physician from abroad who is licensed to practice in one of the states, he may become a citizen by enlisting in the United States Army and after a period of three months may become a citizen and apply for a commission.

Today the situation is much more complicated than in the times of previous wars. A system of extended residencies and assistantships associated with qualification for the certificates of the boards in the various specialties now covers many young graduates in medicine. Especially needed at this time as a means of encouragement to such young men in offering their services to the armed forces is a definite action on the part of each one of the certifying boards indicating the extent to which it will accept military service as a part of the requirement for certification in a specialty of medical practice.

A meeting of the Committee on Medical Preparedness of the American Medical Association was held in Chicago

on May 9. The Committee on Medical Preparedness considered many of the problems which now confront the medical profession in relation to an adequate supply of medical officers for the armed forces. The headquarters of the American Medical Association is giving its fullest cooperation to the Surgeon Generals and to the Office of Procurement and Assignment. The American medical profession has never failed in its response to the government of the United States when its members were needed in time of war.

RESPIRATORS

The National Foundation for Infantile Paralysis, 120 Broadway, New York, has published a valuable booklet entitled "Respirators; Locations and Owners." This list of adult type respirators or "iron lungs" has been compiled from records available April 1, 1942, and contains only those machines which have been approved by the Council on Physical Therapy of the American Medical Association. For Florida, the following respirators are listed:

Bushnell (Sumter)—Mr. J. H. Popham.
Clearwater (Pinellas)—Mr. L. G. Cromartie.
Gainesville (Alachua)—Alachua County Hospital (Owned by B. P. O. E.).
Jacksonville (Duval)—St. Luke's Hospital (3).
Lakeland (Polk)—Morrell Memorial Hospital.
Leesburg (Lake)—Theresa Holland Hospital.
Miami (Dade)—James M. Jackson Memorial Hospital (2). (1 owned by American Legion).
Ocala (Marion)—Munroe Memorial Hospital.
Orlando (Orange)—Orange General Hospital.
Pensacola (Escambia)—Pensacola Hospital (Owned by Escambia County Medical Society).
St. Augustine (St. Johns)—Flagler Hospital (Owned by citizens of St. Johns County).
St. Petersburg (Pinellas)—Mound Park Hospital.
Tampa (Hillsborough)—Tampa Municipal Hospital (2).
Umatilla (Lake)—Harry-Anna Crippled Children's Home.
West Palm Beach (Palm Beach)—Good Samaritan Hospital.
Winter Haven (Polk)—Evans Motor Company.

TIRES FOR MILK TRUCKS

The following letter was mailed to the secretaries of all county medical societies on May 19 by Dr. Shaler Richardson, secretary of the State Medical Association.

At the House of Delegates' meeting in Hollywood, April 14, a resolution was adopted regarding the tire rationing program and the question of tires for vehicles engaged in the delivery of milk to private consumers. I was instructed to transmit a copy of this resolution to Leon Henderson, Price Administrator. On May 12 an answer was received from Charles F. Phillips, Acting Chief, Tire Rationing Division, Temporary Building D, Washington, D. C., transmitting the following:

We are glad to have this opportunity to explain and clarify this matter. At this stage of the tire rationing program it is necessary and desirable that the Tire Rationing Regulations be set up along broad lines and in accordance with the need for disposition of the existing rubber supply in terms of maximum public benefit. Frankly, the problem of tires and tubes for the thousands of vehicles engaged in retail deliveries to the home is one for which we have not, as yet, been able to provide an entirely satisfactory solution. The number of

vehicles involved represents a tire usage far beyond our ability to supply.

The problem of tires for trucks delivering dairy products is one of which we are keenly aware and it is hoped that as a result of the present study some solution may be found.

Meanwhile, none of us can afford to lose sight of the absolute necessity of affording our armed forces first call on our rubber supply. That which remains is being rationed by local Boards with full and fair consideration of all the facts affecting eligibility in each case. Local Boards will be glad to give you full details concerning eligibility requirements.

This information is for members of your county medical society.

MEDICOLEGAL ACTIVITIES

Mr. M. H. Doss, director of the Bureau of Narcotics of the State Board of Health, has submitted the following information:

George A. Munch of Tampa was convicted in Federal Court, April 9, 1942, for using the mails to defraud in the sale of bogus diplomas and Eclectic Board medical licenses, and was sentenced to five years in the penitentiary.

Lyle Park Johnson of Williston was given a two-years' suspended sentence and placed on active probation. He testified for the government in admitting he had paid \$700 for his license to George A. Munch.

Julio Gavilla Lopez of Tampa was given a two-years' suspended sentence and placed on active probation. He testified for the government in admitting he had paid \$1,200 for his license to George A. Munch.

Robert T. McPhaul of Williston, attorney for George A. Munch, was sentenced to three years in the penitentiary.

Ray Hoff of St. Petersburg was convicted in Criminal Court at St. Petersburg, April 14, 1942, for violation of the state medical laws.

Eunice D. Ingham of St. Petersburg was convicted in Criminal Court at St. Petersburg April 14, 1942, for violation of the state medical laws.

S. H. Reck of St. Petersburg was convicted in Criminal Court at St. Petersburg, April 14, 1942, for violation of the state medical laws.

Helene O. Weiss of St. Petersburg was convicted in Criminal Court at St. Petersburg, April 14, 1942, for violation of the state medical laws.

S. E. G. Winchester of Pensacola was tried in the city court, Jacksonville, April 7, 1942, for soliciting funds without a license, and a fine of \$250 or ninety days in jail was imposed. He represented himself as the field general of the War Work Council of the Society of Sociology and Prophylaxis. All funds solicited by this subject were used by himself. No such organization was known.

BIRTHS, MARRIAGES AND DEATHS

BIRTHS

Dr. and Mrs. Dan H. Funkenstein of Jacksonville announce the birth of a son on May 13.

Dr. and Mrs. L. C. Gonzalez of Tampa announce the birth of daughter, Ivette Athalia, on April 12.

Dr. and Mrs. Lynn W. Whelchel of Miami announce the birth of a daughter, Alice Susan, April 14.

MARRIAGES

Dr. Bernard T. Bell and Miss Inza Helene Fripp of Coral Gables were married on May 9.

Dr. F. H. Kauders and Miss Phyllis Salter of Miami were married on April 12.

DEATHS

Dr. Philip Finkle of Brooklyn, formerly of Miami Beach, died March 12, 1942.

Dr. Gladstone E. Francisco of Miami died May 2, 1942.

Dr. J. Lee Summerlin of Gainesville died May 31, 1942.

STATE NEWS ITEMS

Dr. Edward Jelks of Jacksonville, as chairman of the State Procurement and Assignment Service, accompanied by Major W. E. Murphree, M. C., and Major J. J. Laird, Infantry, visited three county medical societies during the month of May.

The first meeting was held in Jacksonville, Tuesday, May 5, with the Duval County Medical Society. The second meeting was held Tuesday, May 12, in Miami with the Dade County Medical Society, and the third on Wednesday, May 20, in Orlando with the Orange County Medical Society.

Other members of the committee in attendance were Dr. Shaler Richardson at the Jacksonville and Orlando meetings, Dr. Walter C. Jones at the Miami meeting, and Dr. Gilbert S. Osincup at the Miami and Orlando meetings. The three meetings were exceptionally well attended and the information brought to the members was received with interest and appreciation.

Dr. Herbert W. Virgin, Jr. of Pensacola was again selected to demonstrate fractures of the spine in the spinal fracture booth of the A. M. A. Fracture Committee, at the Atlantic City meeting in June.

Dr. Robert B. McIver of Jacksonville, secretary of the Chattahoochee Valley Medical Association, announces that the officers and mem-

bers of the Council of that Association have voted to discontinue meetings during the present emergency. The present officials will serve until the first meeting after the war is over. This meeting will be held in Birmingham, Ala.

Drs. Carlos P. Lamar and D. A. Marion of Miami visited the Havana Medical School and hospitals in April. These doctors report that the Hospital Nacional Calixto Garcia and the new School of Medicine show considerable advancement, with the establishment of autonomic research centers in every service, all fully equipped and staffed. They also report that the hospital of the national police force is a marvel of organization and development.

EARL CUNNINGHAM MacCORDY

Dr. Earl Cunningham MacCordy, 51, vice chief of staff at Mound Park hospital and for many years one of St. Petersburg's most prominent physicians, died suddenly at his home on April 5.

Widely known in state medical circles, Dr. MacCordy was local representative of the U. S. Public Health Service, which includes the U. S. Coast Guard. As chairman of the health and housing division of the St. Petersburg defense council, he worked untiringly until his death in organizing and instructing first aid classes.

During the first World War, Dr. MacCordy served as a lieutenant in the medical division. Later he was attached to government hospitals in New Haven, Conn.; Oteen, N. C., and Aspinwall, Pa.

He was graduated from Tufts College Medical School in 1916 and interned at Massachusetts General and Robert Brigham hospitals in Boston. He came to St. Petersburg from Aspinwall in 1925 and began private practice.

Besides serving as vice chief of staff at Mound Park hospital, Dr. MacCordy was a member of the staff of St. Anthony's hospital.

His marriage to Regina Barbara Melber, a graduate of Mound Park hospital nurses' school and a member of Eureka chapter No. 5, Order of Eastern Star, took place March 4.

Dr. MacCordy was a member of the First Avenue Methodist church, was a Thirty-second degree Mason, a member of the Pinellas County Medical Society, the Florida Medical Association, the American Medical Association, the Yacht club and the Army-Navy club.

Survivors include his wife, Mrs. Regina Melber MacCordy; two sons, C. Ramsey MacCordy and Edward MacCordy, and his parents, Mr. and Mrs. Samuel MacCordy, Newport, R. I.

The following tributes have been paid in memory of Dr. MacCordy by his colleagues:

RESOLUTIONS

WHEREAS, Almighty God has seen fit to take unto Himself our friend and associate, Dr. Earl C. MacCordy, in the midst of his professional, patriotic and civic labors, and

WHEREAS, The Pinellas County Medical Society, The City of St. Petersburg and the National Defense Board has lost a willing, untiring, unselfish and faithful worker; his family a respected, loving husband and father

BE IT RESOLVED that we extend to the family our sincere sympathy in their loss; and further

BE IT RESOLVED that a copy of this resolution be placed in the records of the Pinellas County Medical Society, and that a copy be sent to the family and to the Florida Medical Journal.

Adopted by Pinellas County Medical Society, May 1, 1942.

IN MEMORIAM

With profound sorrow, the members of Mound Park Hospital Staff record the death of one of its most earnest and zealous physicians, Dr. Earl C. MacCordy.

Dr. MacCordy was suddenly stricken in the midst of his untiring work as chairman of the health and housing division of the St. Petersburg Defense Council.

Besides serving as vice chief of staff at Mound Park Hospital, Dr. MacCordy was a member of the staff of St. Anthony's hospital.

In St. Petersburg which he loved and served, his patients and friends have suffered a severe loss, as he was always conscientious and faithful in all his varied activities.

With the sense of community-loss is mingled a deep sympathy for the members of his family.

Adopted by members of Mound Park Hospital Staff.

GLADSTONE EDWARD FRANCISCO

Dr. Gladstone E. Francisco of Miami died suddenly on May 2, at the age of 35.

Dr. Francisco was graduated from the Hahnemann Medical College and Hospital of Philadelphia in 1934. In 1937 he secured his license to practice in Florida and shortly thereafter moved to Miami. He was associate attending physician of the medical service of the Jackson Memorial Hospital from 1938 until the time of his death. During the last year or two, Dr. Francisco was considerably interested in the specialty of urology.

PHILIP FINKLE

Dr. Philip Finkle, a newcomer in Florida, died on March 12.

Dr. Finkle, who was born in Russia in 1894, was a graduate of Columbia University, class of 1918. He practiced in New York City for many years. He secured a Florida license in 1939 but did not move to this state until a few weeks before his death, when he opened an office in Miami Beach for the practice of internal medicine. He was a member of the Dade County Medical Society, the Florida Medical Association and the American Medical Association.

COMPONENT COUNTY SOCIETIES

DADE

The regular meeting of the Dade County Medical Society was held Tuesday evening, May 5 at the Jackson Memorial Hospital. Capt. Ted Vanderstempel, guest speaker, presented a lecture on "War Gases."

DESOTO-HARDEE-HIGHLANDS-CHARLOTTE-GLADES

The members of the DeSoto-Hardee-Highlands-Charlotte-Glades County Medical Society held a meeting on the evening of May 19 at the Hotel Simmons, Wauchula. Dr. W. C. Blake of Tampa was the guest speaker.

DUVAL

The Duval County Medical Society has paid 100 per cent of its membership dues for 1942. With a membership of 192, it is the largest society on the fully-paid list.

ORANGE

Drs. R. R. Sessions and Arthur McGugan of Kissimmee entertained the members of the Orange County Medical Society on the afternoon and evening of May 21. Yachting, fishing and golf were features of the afternoon's entertainment. In the evening a barbecue dinner was served at the country club.

PALM BEACH

Two visiting physicians from Chicago were guest speakers at a meeting of the Palm Beach County Medical Society held at St. Mary's Hospital, April 27. Dr. James Callahan, instructor in bone surgery at the Cook County Graduate School of Medicine, spoke on fractured hips; Dr. Robert Hawkins discussed certain phases of obstetrics and gynecology.

PASCO-HERNANDO-CITRUS

Dr. W. Wardlaw Jones of Dade City entertained the members of the Pasco-Hernando-Citrus County Medical Society at a steak dinner at the Gray Moss Hotel, Dade City, Thursday evening, May 14. A business session was held in Dr. Jones' office following the dinner. Minutes of the last meeting were read and adopted. Clinical case reports were given and discussed by all present. Drs. Jones and W. H. Walters gave reports of the state convention held in Hollywood.

Present were: Dr. J. T. Bradshaw, San Antonio; Drs. Jones and R. D. Sistrunk, Dade City; Dr. C. L. Carter, Inverness; Dr. W. H. Walters, Lacoochee; Drs. S. C. Harvard and G. R. Creekmore, Brooksville.

PINELLAS

Drs. E. B. Campbell and R. D. Murphy were the principal speakers at the regular dinner meeting of the Pinellas County Medical Society, held at the Shrine Club, St. Petersburg, May 1.

On the evening of May 15 the society met at Hulette Lodge where a round table discussion was conducted. Dr. L. M. Gable acted as moderator.

POLK

The Polk County Medical Society and the Polk County Auxiliary met for dinner at Clark's Restaurant, Bartow, on the evening of May 13. Dr. J. R. Boulware, Jr. of Lakeland, president of the society, presided. Dr. Henry Fuller of Lakeland read a paper on "Electrocardiograms." The ladies heard a report of the state convention given by Mrs. C. H. Murphy.

PUTNAM

Members of the Putnam County Medical Society held an interesting meeting at the Marion Hotel, Palatka May 5. Judge J. V. Walton, who has devoted much time to the study of the formation of a venereal disease control plan, presented the necessary steps for such a plan. Eight army officers appeared before the group and discussed this subject. The society endorsed the plan. Dr. H. A. Johnson was appointed deputy health officer for Putnam County by the president, Dr. Worth Brantley of Grandin.

Dr. Allen P. Gurganious, chairman of health and housing, stated that the local blood bank had been formed, the funds needed had been raised, and that the blood bank would begin collecting blood from donors within a week.

CONVENTION ECHOES

For the benefit of the host county medical society and the specialty groups that will meet at next year's annual convention of the State Association, this column is printed. A communication from the Association's central office in Jacksonville was mailed to the chairman of each of the committees on arrangements of the Palm Beach County Medical Society, and to the secretary of each specialty group that held an annual meeting at Hollywood in conjunction with the State convention. In past years Convention Echoes were published in the proceedings number of the Journal. This year, however, the responses were so meager that this column was held up until June. No response was received from chairmen of local committees and specialty groups that are omitted in the following writeups.

CABINET COMMITTEE

Lloyd J. Netto, *Chairman*

The organizing of and working with local committees on arrangements of our Palm Beach County Medical Society were indeed a pleasure, in spite of the difficult situation created by the necessity of transferring the annual convention from Palm Beach to Hollywood. Each of our committees functioned efficiently and we hope that the entertainment features met with the approval of the members, guests and ladies who attended. I wish to take this opportunity of publicly thanking the members of our county medical society for their splendid cooperation. We feel that holding our annual meeting under one roof adds greatly to its success. Best of luck and good wishes to the members of Pinellas County Medical Society at the 1943 convention in St. Petersburg.

COMMITTEE ON HOTELS

Roy O. Cooley, *Chairman*

The main function of our committee was to prepare a list of hotels and room rates for those who did not wish to be guests at the headquarters hotel. Our committee made the necessary hotel arrangements in Palm Beach, and then made similar arrangements when the convention was transferred to Hollywood. We assume that our list was adequate, as there has, to date, been no word to the contrary. I wish to thank each member of my committee for his hearty cooperation.

ASSOCIATION OF DERMATOLOGY AND SYPHILOLOGY

Wiley M. Sams, *President*

Our program was disrupted to some extent, owing to the fact that a number of our members in military service were unable to attend. The next meeting of our Association will be held in Jacksonville, Sunday, July 12, at which time the annual election of officers will be held. The attendance at the Hollywood meeting was 6.

SOCIETY OF OPHTHALMOLOGY AND
OTOLARYNGOLOGY

C. E. Dunaway, *Secretary*

We had a very successful meeting in Hollywood and were greatly honored to have Dr. Frank E. Burch of St. Paul, Minn., as our invited guest. Dr. Allen Greenwood of Boston and Dr. John H. Barnhill also honored us with their presence. The newly elected officers are: president, Dr. Shaler Richardson, Jacksonville; vice president, Dr. R. E. Repass, Miami Beach; secretary (re-elected), Dr. C. E. Dunaway, Miami. The attendance totaled 52.

ASSOCIATION OF INDUSTRIAL SURGEONS

Richard H. Walker, *Secretary*

The newly elected officers are: president, Dr. Frank D. Gray, Orlando; president-elect, Dr. Kenneth A. Morris, Jacksonville; vice president, Dr. F. A. Vogt, Miami; secretary-treasurer, Dr. Richard H. Walker, Orlando. The attendance at the scientific session was 30 and at the smoker, 40.

FLORIDA SECTION, COLLEGE OF PHYSICIANS

Kenneth Phillips, *Secretary*

There was an increasing interest displayed in the program this year. Also there was definite evidence of increased interest in the welfare of the American College of Physicians and its various subdivisions. Dr. J. E. Paullin of Atlanta was installed as president of the American College of Physicians at St. Paul during the session beginning April 20. The attendance at the scientific session was 42 and at the luncheon, 38.

RAILWAY SURGEONS

Walter C. Page, *Secretary*

To most of the older members, the 1942 meeting and program were of the best balanced and most useful that we have held during the nearly a quarter of a century that our Association has been in existence. The scientific program was designed to meet the needs and diversified form of service that is usually required of the men who are in the railroad medical service, especially those located in the smaller cities and towns. One outstanding event of the program was the address of Dr. Joseph D. Collins, chief surgeon of the Seaboard Airline Railway, our invited guest speaker. Newly elected officers are: president, Dr. Frank D. Gray, Orlando; vice president, Dr. Vernon A. Lockwood, St. Augustine; secretary-treasurer (reelected), Dr. Walter C. Page, Cocoa. Attendance figures not submitted.

HEALTH OFFICERS

W. E. Van Landingham, *Acting Secretary*

The outstanding features of our meeting were the discussions pertaining to the administration of a small county health unit, and the importance of epidemiology. The annual election of officers is held in December. The attendance totaled 13.

BOARD OF PAST PRESIDENTS

Dr. Henry C. Dozier of Oklawaha on Lake Weir forwarded the following letter dated May 25 to Dr. William E. Ross, former chairman of the Board of Past Presidents.

My dear Ross: Know nothing that has given me a greater 'lift' than the 'President's Breakfast' menu, with the names of those 'missing me' signed on the back. Those names, I know, were more than 'doctors'—they were 'friends,' and I appreciate their thoughtfulness more than I can express.

Am beginning to sit up—can walk to bathroom and meals, and sit up, without any bad effects—but that seems to be the limit of my physical capacity. Have had some nice letters from friends who have suffered the same coronary disability, and they all say 'rest and in a few years you will be O. K. again.' That's encouraging and I am still hoping that I can see all you boys again, and possibly return to the life that gave me so many happy years. Thanks to you all.

The menu to which Dr. Dozier refers was signed by the following past presidents: Henry E. Palmer, Homer Pearson, W. P. Adamson, G. R. Holden, O. O. Feaster, J. A. Simmons, F. J. Waas, Julius C. Davis, Herbert L. Bryans, Edward Jelks, Leigh F. Robinson, J. S. Turberville, and William E. Ross.

BUREAU OF
PROFESSIONAL
RELATIONS

University of Florida—School of Pharmacy

GLYCINE

According to Sollmann,¹ glycine (amino-acetic acid, NNR) has given beneficial results in some cases of myasthenia gravis and muscular dystrophy. It causes a large increase of the creatine metabolism with pronounced improvement in the histologic picture and in the clinical symptoms.

In cases of fatigue, reports vary as to the curative action of glycine. While one author claims that glycine increases strength in man, another demonstrates that it is no more effective than a placebo. It seems fairly well established, however, that glycine effects creatine metabolism, which in turn plays a leading role in the metabolism of skeletal muscles.

In a recent report² 14 distinct and different tests of strength and endurance were described, showing the action of glycine. Forty patients received a daily dose of 6 Gm. of glycine, and results were checked against a control of 19 patients who received a fixed quantity of sugar. In the test group, grip strength and lifting strength improved materially, increasing even as high as 22 per cent.

Of recent interest has been the definite association of thiamin hydrochloride with fatigue.³ In induced thiamin deficiencies in man, fatigue develops early as the first symptom of deficiency. In fact, the early stages of induced deficiency of vitamin B₁ resemble neurasthenia symptomatically. In a gross analysis of fatigue, a French author⁴ reported that cyclists who ingested thiamin hydrochloride before endurance tests noticed definitely less fatigue after fixed exercises. He recommended the use of thiamin hydrochloride by all persons who do physical work or who already suffer from asthenia or fatigue. Experimental work on animals has shown that thiamin delays fatigue in muscles of the frogs.⁵

Of perhaps more than empiric use, then, would be the employment of therapeutic doses of thiamin and glycine in fatigue or asthenia, glycine usually being given in a minimal dose of from 5 to 6 Gm. daily (78 to 93 grains).

REFERENCES

1. Sollmann T.: Manual of Pharmacology, p. 69, 1942.
2. Chaikelis, A. S.: Effect of Glycocol (Glycine) Ingestion Upon Growth, Strength and Creatinine-Creatine Excretion in Man, *Am. J. Physiol.* **132**: 578-587 (Apr.) 1941.
3. Editorial: Induced Thiamin Deficiency in Man, *J. A. M. A.* **116**: 707-708 (Feb. 22) 1941.
4. *Chem. Abst.* **35**: 8095 (1941).
5. *Chem. Abst.* **35**: 775 (1941).

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, INC.

OFFICERS

MRS. F. W. KRUEGER, President.....*Jacksonville*
MRS. C. H. MURPHY, First Vice-President.....*Bartow*
MRS. P. J. MANSON, Second Vice-President.....*Miami*
MRS. WM. H. BALL, Corresponding Secretary *Jacksonville*
MRS. W. C. WILLIAMS, Recording
Secretary & Treasurer.....*West Palm Beach*
MRS. J. L. ANDERSON, Historian.....*Coral Gables*
MRS. LEIGH F. ROBINSON, Parliamentarian *Ft. Lauderdale*

COMMITTEE CHAIRMEN

MRS. PAUL KELLS, Defense.....*Miami*
MRS. S. M. COPELAND, Press & Publicity.....*Jacksonville*
MRS. P. J. MANSON, Hygeia.....*Miami*
MRS. RUPERT STOVALL, Public Relations.....*Ft. Lauderdale*
MRS. E. M. HENDRICKS, Legislation.....*Ft. Lauderdale*
MRS. GORDON H. IRA, Finance.....*Jacksonville*
MRS. H. A. LEAVITT, Exhibit.....*Miami*
MRS. W. J. BARGE, Archives.....*Miami*
MRS. GEORGE C. TILLMAN, Student Loan.....*Gainesville*
MRS. C. H. MURPHY, Program.....*Bartow*
MRS. P. J. MANSON, Organization.....*Miami*
MRS. C. E. ROYCE, Bulletin.....*Jacksonville*

DISTRICT CHAIRMEN

MRS. T. C. KENASTON, General Chairman.....*Cocoa*
MRS. LAURIE J. ARNOLD, JR., District "A".....*Lake City*
MRS. J. H. OWENS, District "B".....*Jacksonville*
MRS. JAMES C. GRIFFIN, District "C".....*Tampa*
MRS. LEIGH F. ROBINSON, District "D".....*Ft. Lauderdale*

A LETTER FROM THE PRESIDENT

Dear Friends and Co-workers:

As your president for the coming year, I extend to you my sincere greetings. May I express thanks for the high honor given me. I feel very keenly the responsibility that rests upon me and must ask for your support and cooperation in all the work that is undertaken. This year as perhaps never before in the history of our country, we need cooperation, loyalty, trust, friendship, and a determination to do all in our power to keep this nation God-fearing and free.

Our charges for the coming year are much the same as those of last year. This year, however, we must think of each charge in the light of national defense. May I mention a few. This year nutrition is most important, because the strength of the nation depends upon the health of the individual. The health of the individual depends in a large measure upon the hygienic conditions of the public. Therefore, the dissemination of information by the distribution of Hygeia is of utmost importance. This is also true of the educational radio programs sponsored by the American Medical Association. These two sources of information will aid immensely in calling to the attention of the public the importance of tuberculosis, cancer, and venereal disease control.

I would like every county and district president to please send to me and to all state offi-

cers and chairmen a complete list of local officers and chairmen with addresses, as soon as possible, if this has not already been done. This information will be very much appreciated.

The value of having Hand Books for all officers and chairmen cannot be over-emphasized. These books can be handed down from year to year. If your Auxiliary has not been supplied, please see to that this year. Subscribing to and reading the Bulletin is most important if we wish to be well informed. The Bulletin is only \$1.00 a year.

I wish for all of you a very pleasant summer. Because of the war we will be busy with defense work one way or another. Spend a little time planning your work for the coming year. I shall be glad to hear from you at any time if I can be of service to you in any way.

Lida A. Krueger

(Mrs. F. W. Krueger)

INDEX TO VOLUME XXVIII

Abdominal Wall Pain, Surgical Significance of (abst)	559
Abnormal Presentations, Labor in.....	159
Abortion, the Inevitable and Incomplete, a Plea for the Conservative Treatment of.....	338
Abstract Department — Briefs of articles by:	
Anderson, E. V., Pensacola.....	500
Borland, J. L., Jacksonville.....	188
Bowen, Fred H., Jacksonville.....	404, 500, 559
Burch, J. E., Miami.....	46
Forbes, S. B., Tampa.....	92
French, Elmo D., Miami.....	136
Gachet, Fred S., Lakeland.....	454
Hollender, A. R., Miami Beach.....	240
Irwin, Thomas M., Orlando.....	136
Jewett, Eugene L., Orlando.....	559
Levin, Alfred G., Miami.....	240
McIver, Robert B., Jacksonville.....	136
Marks, Meyer B., Miami Beach.....	92, 559
Needles, Robert J., St. Petersburg.....	136
Phillips, Kenneth, and Litterer, A. Buist, Miami.....	46
Sams, Wiley M., and Capland, Lewis, Miami.....	298
Sandels, M. R., Cate, H. D., Wilkinson, K. P., and Graves, L. J., Tallahassee.....	240
Saslaw, Milton S., Camp Shelby, Miss.....	404
Shahan, John, Clearwater.....	92
Smith, Donald W., Miami, and Bates, William, Philadelphia.....	559
Torpin, Richard, Augusta, Ga., and Hart, B. F., Winter Park.....	298
White, Herbert E., St. Augustine.....	135
Accepted Florida Formulary.....	453
Accidentally Transmitted Malaria (abst).....	559
Address of President.....	523
Air Sickness in Pilot Training.....	594
Allergy (edit).....	393
A. M. A. Broadcasts (edit).....	346
A. M. A. House of Delegates, Report of Fla. Delegates to.....	400
A. M. A. Meeting.....	40
A. M. A., U. S. Government vs.....	39
Aminophylline in Cheyne-Stokes Respiration.....	489
Annual Convention (edit).....	495
Annual Registration.....	348
Annual Tuberculosis Conference (edit).....	598

Appendiceal Lithiasis, Multiple, An Unusual Case (abst)	92	Convention City, Palm Beach	438
Appendicitis, Conditions Simulating	265	Convention Echoes	603
Application of the Synthetic Sex Hormones, Male and Female in the Newer Forms; Preliminary Report of Therapy with Stilbestrol and Methyl Testosterone	211	Coordinating the School and Health Program	176
Are Your Society Dues Paid	400	Councilor and Medical Districts (map)	551
Army, Physicians Are Urged to Seek Commissions Immediately	599	Councilors' Reports	398
Arrhythmias, Cardiac	71	Cyst of Epiglottis, Congenital; Report of Case (abst)	136
Association's Annual Meeting (edit)	554	Course and Prognosis of Hemorrhagic Nephritis in Children (abst.)	454
Attendance Urged	439	Danger of Eye Injuries from Blasting Caps	87
Atypical Pneumonia (abst)	136	Deafness, Nerve, Etiology of, with Particular Reference to Quinine. (abst)	92
Auricular Fibrillation, Use of Quinidine Sulfate in Treatment of	378	Death Notices (see Obituaries)	
Banting, Benefactor of Mankind	15	Defense, Role of the Physician in	475
Biliary Tract, Foreign Bodies in (abst)	559	Deferment of Medical Students	232
Blindness, Prevention of (edit)	343	Deficiency, Vitamin A, Follicular Conjunctivitis in School Children as Expression of (abst)	240
Blood Vessels, Peripheral, Occlusive Lesions of	29	Delegates and Committee Chairmen, Notice to (edit)	448
Books Received:		Delegates to A.M.A., Report of	400
A.M.A.: Annual Report of the Reports of the Council on Pharmacy and Chemistry, 1940	300	Delivery Home, Role of in Treating the Low Income Group	162
A.M.A.: New and Nonofficial Remedies, 1941	188	Dermatology, Fever Therapy by Physical Means in (abst)	46
Becker, S. William: Modern Dermatology and Syphilology	190	Diarrhea, Chemotherapy of with Sulfathiazole (abst)	500
Carlson, Earl R.: Born that Way	138	Diathermy, Short Wave, Present Status in the Treatment of Nasal Sinusitis (abst)	240
Eliason, Eldridge L.: First Aid in Emergencies	138	Diets (edit)	392
Greenblatt, Robert: Office Gynecology	453	Digitalis Poisoning	586
Leaman, William G.: Management of the Cardiac Patient	44	Directory Information Card, Return it Promptly (edit)	131
National Foundation for Infantile Paralysis: Infantile Paralysis, 1941	138	District Meeting, Your (edit.)	87
Smith, Frederick C.: Proctology for the General Practitioner	190	District Meetings, First Series (edit.)	131, 233
Smith, Geddes: Plague on Us	92	District Meetings, Second Series (edit.)	180, 294
Taber, Clarence W.: Taber's Cyclopedic Medical Dictionary Including a Digest of Medical Subjects	44	Drugs Commonly Used in Urology	78
Broadcasts, A.M.A. (edit)	346	Dues, Are Yours Paid	400
Burch, Frank E., M.D. (edit)	599		
Call to the Medical Profession (edit)	345	Elkin, Daniel C., M.D., Our Guest of Honor	447
Cancer in Children Under Three Years of Age, 3 Cases	289	Endocrines, Use of in the Treatment of Functional Menstrual Disorders	122
Cancer of the Skin, Extensive or Advanced, Surgical Treatment of	373	Enrollment Form for Procurement and Assignment Service	346
Cardiac Arrhythmias	71	Epiglottis, Congenital Cyst of; Report of Case (abst.)	136
Cardiac Pain, Use of Cobra Venom and Oxygen in Control of	381	Etiology of Nerve Deafness with Particular Reference to Quinine (abst.)	92
Changes, Journal (edit)	343	Examinations for Medical Positions Announced by Civil Service Commission	88
Chemotherapy of Infectious Diarrhea with Sulfathiazole (abst)	500	Exhibit, Technical	448
Cheyne-Stokes Respiration, Aminophylline in	489	Experiences of a Railway Surgeon and Country Doctor	226
Children's Bureau Needs Maternal and Child Health Specialists	183	Experiences with Hydrophil Bases and Sulfonated Products (abst.)	136
Children, Course and Prognosis of Hemorrhagic Nephritis in (abst)	454	Eye Injuries, Danger from Blasting Caps	87
Children, Nephritis in, as Observed in Florida	480	"Eye" Service at Fla. State Hospital, a Year's in Retrospect	333
Children Under Three Years of Age, Cancer in 3 Cases	289		
Civil Service Commission Announces Examinations for Medical Positions	88	Factors in the Diagnosis of Intestinal Protozoa in Man and the Interpretation of the Findings (abst.)	188
Civilian Defense Bulletin No. 2 (edit.)	293	Fallacious Views Concerning Rhinologic Surgery and Factors Influencing More Successful Results	27
Cobra Venom and Oxygen in the Control of Cardiac Pain	381	Fever Therapy by Physical Means in Dermatology (abst.)	46
Coercion of Hospital Workers Condemned	39	Flooring, New, Reduces Risks of Foot Infection	182
Committee Chairmen and Delegates, Notice to (edit)	448	Florida Criminal Law, Medicine and	115
Compensation in Industrial Ophthalmology	387	Florida Legislature (edit.)	36
Conditions Simulating Appendicitis	265	Florida State Hospital, a Year's "Eye" Service in Retrospect	333
Congenital Cyst of the Epiglottis; Report of Case (abst)	136	Follicular Conjunctivitis in School Children as Expression of Vitamin A Deficiency (abst.)	240
Conjunctivitis, Follicular, in School Children as Expression of Vitamin A Deficiency (abst.)	240	Foot Infection, New Flooring Reduces Risks of	182
Convention, Annual (edit.)	495	Foreign Bodies in the Biliary Tract (abst.)	559
Convention City, Hollywood (insert)	438A	Formulary, Accepted Florida	453
		Fractures of the Pelvis	385
		Fractures of the Tibia	583

Fractures, Trochanteric, One-Piece Angle Nail for (abst.)	559	Medical Licenses Granted	132, 397
Glaucoma, Primary, the Management of	169	Medical Postgraduate Short Course	396, 448, 497, 555, 556, 557
Glycine	604	Medical Practice Act, Violations of	182, 233, 346, 600
Gonorrhea, Public Health Control of	286	Medical Profession, A Call to (edit.)	345
Gonorrhea, Treatment with Sulfanilamide	82	Medical Students, Deferment of	232
Guest of Honor, Daniel C. Elkin, M.D.	447	Medicine and Florida Criminal Law	115
Hand, Treatment of Injuries of	66	Medicine and Law, the Ways of	126
Hazards Involved in Treatment with Sulfanilamide	183	Medicine, the Yesterday of	433
Health and School Program, Coordinating the	176	Medicolegal Activities	182, 233, 346, 600
Hemorrhagic Nephritis in Children, Course and Prognosis (abst.)	454	Meetings:	
Hollywood, Convention City (insert)	438A	American Medical Association	40
Hormones, Synthetic Sex, Application of; Preliminary Report of Therapy with Stilbestrol and Methyl Testosterone	211	Annual (see Proceedings)	
Hospital and National Emergency	484	Chattahoochee Valley Medical Society	88
Hospital Workers, Coercion of Condemned	39	District, 1941	50, 87, 131, 180, 233, 294
Hydrophil Bases and Sulfonated Products, Experiences with (abst.)	136	District, 1942	598
Hymen, Imperforate, Before the Menarche with Mucocolpos and Mucometrium (abst.)	500	Florida East Coast Medical Assn.	135, 396
Hypersensitivity to Sulfanilamide Following Roentgen Therapy (abst.)	92	Gulf Coast Clinical Society	297
Hyperthyroidism	588	Preconvention	232, 293, 397
Ileitis, Regional (abst.)	135	Southeastern Surgical Congress, Florida Section	42, 134
Immunization, Modern Methods of	330	Southern Medical Association	180
Imperforate Hymen Before the Menarche with Mucocolpos and Mucometrium (abst.)	500	State Board of Medical Examiners	132, 397
Index to Advertisements	144, 190, 304, 568	Statewide Public Health Committee	393
Index to Authors, Vol. XXVIII	612	Members in Armed Services (edit)	598
Index to Volume XXVIII	605	Menstrual Disorders, Functional, Use of Endocrines in Treatment of	122
Industrial Ophthalmology, Compensation in	387	Methyl Testosterone and Stilbestrol, Preliminary Report of Application of Synthetic Sex Hormones, Male and Female, in their Newer Forms	211
Industrial Surgeon, Labor and the	175	Military Service, Members in (edit)	598
Infants, Transfusions in (abst.)	46	Milk Trucks, Tires for	600
Infection, Foot, New Flooring Reduces Risks of	182	Modern Methods of Immunization	330
Influenza, Quinine as a Prophylactic	383	Mucocolpos and Mucometrium; Imperforate Hymen before the Menarche (abst.)	500
Injuries, Eye, Danger from Blasting Caps	87	National Emergency, the Hospital and the	484
Injuries, Minor, Unrecognized Importance of	431	National Emergency, Recommendations to all Physicians with Reference to	394
Injuries of Hand, Treatment of	66	Nephritis, Hemorrhagic, in Children; Course and Prognosis (abst.)	454
Intestinal Protozoa, Factors in Diagnosis of and Interpretation of Findings (abst.)	188	Nephritis in Children as Observed in Florida	480
Intussusception Associated with a Polyp in a Meckel's Diverticulum (abst.)	404	Nerve Deafness, Etiology of, with Particular Reference to Quinine	92
Iron Therapy	500	Neurologic Symptoms Applicable to General Practice, Mechanism of	477
Journal Changes (edit.)	343	New Flooring Reduces Risks of Foot Infection	182
Judge Proctor Imposes Sentence	39	New Test for Determining Adequacy of Connecting Varicose Veins	89
Labor and the Industrial Surgeon	175	Notice to Delegates and Committee Chairmen (edit.)	448
Labor, Normal, Use of Solution of Posterior Pituitary Extract in	33	Obituaries and Death Notices:	
Labor in Abnormal Presentations	159	Anderson, Thomas S., Live Oak	184, 237
Laboratory, Public Health, and the Private Practitioner	427	Bacon, Henry, Jacksonville	401, 451
Law and Medicine, the Ways of	126	Bell, Kenneth R., Sanford	348
Legislature, Florida (edit.)	36	Brantley, Z., Grandin	401, 451
Lithiasis, Multiple Appendiceal, an Unusual Case (abst.)	92	Eide, A. T., Lake Placid	184, 237
McNutt, Paul V. Becomes Director of Health, Welfare and Related Activities	181	Etheredge, Shuler H., Tampa	40, 42
Malaria Accidentally Transmitted (abst.)	559	Finkle, Philip, Brooklyn	601, 602
Management of Primary Glaucoma	169	Francisco, Gladstone E., Miami	601, 602
Map, Medical and Councilor Districts	551	Greene, Ralph N., Coral Gables	89, 185
Mechanism of Neurologic Symptoms Applicable to General Practice	477	Halton, Jack, Sarasota	496, 498
Meckel's Diverticulum, Intussusception Associated with a Polyp in (abst.)	404	Johnston, J. Kent, Tallahassee	89, 186
Medical and Councilor Districts (map)	551	MacCordy, Earl C., St. Petersburg	557, 601
Medical Aspects of the Selective Service System (abst.)	404	Marney, Charles R., Tampa	184, 237
Medical District Meetings, 1942 (edit)	598	May, Robert D., Jacksonville	184, 235, 237
Medical Division of Civilian Defense Issues Bulletin No. 2 (edit.)	293	Miller, Benjamin E., New Smyrna Beach	348, 401
		Mills, John H., Tampa	348, 402
		Moran, Mitchell L., St. Petersburg	348
		Summerlin, J. Lee, Gainesville	601
		Occlusive Lesions of the Peripheral Blood Vessels	29
		One-Piece Angle Nail for Trochanteric Fractures (abst.)	559
		Ophthalmology, Industrial, Compensation in	387
		Opportunities for Special Work in Student Pilot Training, with Special Reference to Air Sickness	594
		Osincup, Gilbert S., Our President (edit.)	553

Oxygen and Cobra Venom in the Control of Cardiac Pain	381
Pain, Abdominal Wall, Surgical Significance of (abst.)	559
Pain, Cardiac, Use of Cobra Venom and Oxygen in Control of	381
Pain Produced by Urologic Disease	120
Palm Beach, the Convention City	438
Pelvis, Fractures of	385
Pelvis, Renal, Plastic Surgery of (abst.)	136
Peripheral Blood Vessels, Occlusive Lesions of	29
Physician's Place in Public Health	173
Physicians Testifying in Court for Government, Treatment of	183
Physicians Urged to Seek Army Commissions Immediately	599
Pilot Training, with Special Reference to Air Sickness	594
Pitressin, Use of in Preoperative and Postoperative Treatment	229
Placenta Bilobata (abst.)	298
Plague Control Conference (edit.)	132
Plastic Surgery of Renal Pelvis (abst.)	136
Plea for the Conservative Treatment of the Inevitable and Incomplete Abortion	338
Pneumonia, Atypical (abst.)	136
Pneumonolysis, Intrapleural, in Artificial Pneumothorax Therapy in Pulmonary Tuberculosis	84
Poisoning, Digitalis	586
Posterior Pituitary Extract, Use in Normal Labor	33
Postgraduate Course	396, 448, 497, 555
Faculty for	557
Schedule for	556
Practicing Physician's Place in Public Health	173
Preconvention Meeting (see Meetings)	
Pregnancy, Toxemia of	164
Present Status of Radiation Therapy in Nasal Sinusitis (abst.)	240
Present Status of Short Wave Diathermy in the Treatment of Nasal Sinusitis (abst.)	240
President's Address	523
Prevention of Blindness (edit.)	343
Preventriculosis; Report of Case	222
Proceedings of 69th Annual Meeting of Florida Medical Association	528
Procurement and Assignment Service, Enrollment Form for	346
Procurement and Assignment, Washington Conference on	557
Program of 69th Annual Meeting	440
Protozoa, Intestinal, Factors in Diagnosis of and Interpretation of Findings (abst.)	188
Public Health Control of Gonorrhea	286
Public Health Laboratory and the Private Practitioner	427
Public Health, Practicing Physician's Place in	173
Quinidine Sulfate in Treatment of Auricular Fibrillation	378
Quinine as a Prophylactic in Influenza	383
Radiation Therapy in Nasal Sinusitis, Present Status of (abst.)	240
Railway Surgeon and Country Doctor, Experiences of a	226
Recommendations to All Physicians with Reference to the National Emergency	394
Regional Ileitis (abst.)	135
Registration, Annual	348
Registration at 69th Annual Meeting	548
Renal Pelvis, Plastic Surgery of (abst.)	136
Report, Fla. Delegates to A.M.A. House of Delegates	400
Reports of Councilors	398
Respiration, Cheyne-Stokes, Aminophylline in	489
Respirators (edit.)	132, 600

**"EUREKA, I BELIEVE
THIS IS IT!" Said
A Doctor When He Saw This
New Spencer Brassiere**



A physician, after seeing a demonstration of the new Spencer Uplift Brassiere on one of his patients, exclaimed, "Eureka, I believe this is it!" He had been seeking a Brassiere that would adequately support heavy breasts, without compression.

This new Spencer Brassiere is *individually designed*, cut and made for the one patient who is to wear it. It supports and holds the breasts in natural position, thus improving the circulation of the blood through the breasts.

When worn during pregnancy, this new Brassiere helps prevent outer skin from stretching and breaking. During the nursing period, it helps prevent caking.

**Special Sleeping Brassieres
Augment Day-Time Treatment**

This new Brassiere may also be designed for wear during sleeping hours, so that your prescribed treatment will be constant. It is designed to permit automatic adjustment to the turning and twisting of the body during sleep, yet provides positive uplift for the breasts.

For service at your office, the hospital or patient's home, look in telephone book under "Spencer Corsetiere" or write direct to us.

MAY WE SEND YOU THIS BOOKLET?

**SPENCER INDIVIDUALLY
DESIGNED
SUPPORTS** Abdominal and Back Supports - Breast Supports

HOW SPENCER SUPPORTS AID
THE DOCTOR'S TREATMENT

SPENCER CORSET COMPANY, Inc.
129 Derby Ave., New Haven, Conn.
In Canada: Rock Island, Quebec.
In England: Spencer (Banbury) Ltd.,
Banbury, Oxon.

Please send me booklet, "How Spencer Supports Aid the Doctor's Treatment."

.....M. D.

Address.....



Dr. Randolph's Sanitarium
JACKSONVILLE, FLORIDA

Registered A. M. A.

FOR THE CARE AND TREATMENT OF
NERVOUS AND MILD MENTAL CASES

Comfortably furnished rooms. Home atmosphere emphasized. Utmost privacy. Tactful nursing. Number patients limited to insure maximum attention.

JAMES H. RANDOLPH, M.D.

Resident Neuropsychiatrist

4422 HERSCHEL STREET JACKSONVILLE, FLA.
PHONE 2-2330

JACKSONVILLE

TAMPA

ORLANDO

MIAMI

SURGICAL SUPPLY COMPANY

"Florida's Surgical Supply House"

HENRY L. PARRAMORE
Pres. and Gen. Mgr.

T. EMMETT ANDERSON
Vice-President

YOUR PATRONAGE GREATLY APPRECIATED

HOW WELL CAN YOUR
PATIENTS SEE?

American eyes on civilian defense—on defense production—on the target for tonight . . . all see more efficiently than is to American professional and scientific skill, but with the progress of your professional technique, had you not encouraged us to strive constantly for improvements . . . Had we decided that no finer Tillyer lenses could be made than those we first produced—had we been reluctant to make improvements in instrumentation . . . Had you and we not sought unceasingly for "something better," America would not have the finest vision in the world today—a vital advantage in all phases of war effort.



BUY UNITED STATES GOVERNMENT WAR BONDS

THE American  Optical COMPANY

PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

Return Your Information Card for the Directory Promptly (edit.)	131
Review of Some of the Drugs Commonly Used in Urology	78
Rheumatic Fever, Sulfanilamide Effective Against Flare-ups of	88
Rhinologic Surgery, Fallacious Views and Factors Influencing More Successful Results	27
Rickettsial Diseases in the South	270
Roentgen Therapy, Hypersensitivity to Sulfanilamide Following (abst.)	92
Role of the Delivery Home in Treating the Low Income Group	162
Role of the Physician in Defense	475
School and Health Program, Coordinating the	176
Selective Service System, Medical Aspects of (abst.)	404
Sinusitis, Nasal, Present Status of Radiation Therapy in (abst.)	240
Sinusitis, Nasal, Present Status of Short Wave Diathermy in (abst.)	240
Skin, Surgical Treatment of Extensive or Advanced Cancer of	373
Southern Medical Association, Meeting of (edit.)	180
Sporotrichosis	61
State Board of Medical Examiners	132, 397
Statewide Public Health Committee, Meeting of	393
Sterility in Man	491
Stilbestrol and Methyl Testosterone, Preliminary Report of Application of Synthetic Sex Hormones, Male and Female, in their Newer Forms	211
Sulfanilamide Effective Against Flare-ups of Rheumatic Fever	88
Sulfanilamide, Hazards Involved in Treatment with Sulfanilamide, Hypersensitivity to Following Roentgen Therapy (abst.)	183
Sulfanilamide, Treatment of Gonorrhea with	92
Sulfathiazole, Chemotherapy of Infectious Diarrhea with (abst.)	82
Sulfathiazole, Topical	500
Sulfathiazole, Topical Treatment with (abst.)	560
Sulfonated Products and Hydrophil Bases, Experiences with (abst.)	298
Surgeon, Industrial, Labor and the	136
Surgery, Plastic, of Renal Pelvis (abst.)	175
Surgery, Rhinologic, Fallacious Views Concerning and Factors Influencing More Successful Results	136
Surgery, Use of Vitamins in	27
Surgical Significance of Abdominal Wall Pain (abst.)	323
Surgical Treatment of Extensive or Advanced Cancer of the Skin	259
Technical Exhibit	373
Three Cases of Cancer in Children Under Three Years of Age	448
Tibia, Fractures of	289
Tires for Milk Trucks	583
Topical Sulfathiazole	600
Topical Treatment with Sulfathiazole (abst.)	560
Toxemia of Pregnancy	298
Transfusion in Infants (abst.)	164
Treatment of Gonorrhea with Sulfanilamide	46
Treatment of Injuries of the Hand	82
Treatment of Physicians Testifying in Court for Government	66
Trochanteric Fractures, One-Piece Angle Nail for (abst.)	183
Tuberculosis Conference, Annual (edit.)	559
Tuberculosis, Pulmonary, Value of Intrapleural Pneumolysis in Artificial Pneumothorax Therapy	598
Unrecognized Importance of Minor Injuries	84
Unusual Case of Multiple Appendiceal Lithiasis (abst.)	431
	92

Miami Retreat

Established 1927

*For Invalids, Mental and Nervous Diseases,
Alcohol and Drug Patients*

RECOVERIES: 60% of mentally ill patients treated over a period of years were returned to their families within a period of ninety days or less, these patients were detained as Psychopathic and not committed.

TREATMENT: As indicated, the usual accepted treatments of metrazol, insulin, malaria, hydrotherapy, occupational therapy and mental hygiene were adhered to.

POLICY: An eleemosynary or not for profit institution, well equipped for the individual treatment of all types of patients. A medical and social outpatient service is rendered.

RATES: Special rates and transportation may be arranged for persons in straightened circumstances.

FACILITIES: Nicely furnished rooms single and en suite are moderately priced, some are air conditioned. Spaciousness permits segregation and proper grouping of patients.

LOCATION: Spacious tropically landscaped grounds, in a quiet neighborhood affording an atmosphere of rest and luxurious comfort.

STAFF: Attending and consulting physicians, graduate nurses, and trained attendants male and female.



North Miami Ave. at 79th St.

Telephone 7-1824

KOROMEX DIAPHRAGM



KOROMEX TRIP-RELEASE INTRODUCER

TIP TURNS
ON SWIVEL

Holland-Rantos
Company, Inc.

551 Fifth Avenue

New York, N.Y.

Urologic Disease, Pain Produced by.....	120	Johnson, Lucius W., Pensacola.....	484
Urology, Drugs Commonly Used in.....	78	Jones, Walter C., Miami.....	523
Use of Cobra Venom and Oxygen in the Control of Cardiac Pain.....	381	Kennedy, Sidney G., Pensacola.....	588
Use of Endocrines in the Treatment of Func- tional Menstrual Disorders.....	122	Lamar, Carlos P., Miami.....	211
Use of Pitressin in Preoperative and Postopera- tive Treatment.....	229	Limbaugh, Louie, Jacksonville.....	378
Use of Quinidine Sulfate in the Treatment of Auricular Fibrillation.....	378	Lippow, C., Miami Beach.....	82
Use of Solution of Posterior Pituitary Extract in Normal Labor.....	33	McConnell, W. C., St. Petersburg.....	477
Use of Vitamins in Surgery.....	323	McConnell, W. H., St. Petersburg.....	477
Value of Intrapleural Pneumonolysis in Artificial Pneumothorax Therapy in Pulmonary Tuberculosis.....	84	Mabry, Charles B., Jacksonville.....	583
Varicose Veins, New Test for Determining Ade- quacy of Connecting.....	89	Melvin, Perry D., Miami.....	491
Venom, Cobra, and Oxygen in the Control of Cardiac Pain.....	381	Mills, Alvin L., St. Petersburg.....	78
Violations of Medical Practice Act.....	182, 233, 346, 600	Nelson, Robert G., Tampa.....	159
Vitamin A Deficiency, Follicular Conjunctivitis in School Children as Expression of (abst.).....	240	Netto, Lloyd J., West Palm Beach.....	431
Vitamins in Surgery, Use of.....	323	Nickle, M. A., Clearwater.....	433
War Problems (edit.).....	448	Norris, Samuel R., Jacksonville.....	164
Washington Conference on Procurement and As- signment.....	557	Osincup, Gilbert S., Orlando.....	475
Ways of Law and Medicine.....	126	Palmer, Henry E., Tallahassee.....	289
Woman's Auxiliary:		Palmer, Thomas M., Jacksonville.....	330
Charges, 1941.....	248	Patterson, J. N., Jacksonville.....	427
District Meetings.....	244	Pickett, W. H., Jacksonville.....	173
National Meeting.....	48, 504	Rash, Jack O. W., Miami.....	270
President's Letter.....	94, 605	Roberts, William Carmel, Panama City.....	338
Publicity.....	406	Roche, C. Frederic, Miami Beach.....	489
Report from Mrs. Ingram.....	302	Slaughter, Frank G., Jacksonville.....	265
Relationship of Member to Auxiliary, Pro- fession and Public.....	140	Stannus, D. G., Miami Beach.....	489
State Convention.....	564	Stebbins, A. L., Pensacola.....	176
Women in National Defense.....	406	Travers, M. Paul, Miami Beach.....	66
Words (edit.).....	495	Wallis, T. H., Ocala.....	122
Year's "Eye" Service at the Florida State Hos- pital in Retrospect.....	333	Willis, Hillard W., Coral Gables.....	480
Yesterday of Medicine.....	433	Wright, Claude B., St. Petersburg.....	33
Your Attendance Urged.....	439	Wylie, LeRoy A., St. Petersburg.....	229
		Zieve, Sanford L., Orlando.....	323

INDEX TO AUTHORS

Annis, J. W., Lakeland.....	71
Barge, H. A., Miami.....	383
Bates, T. H., Lake City.....	385
Black, Nelson M., Miami.....	387
Black, Thomas C., Orlando.....	84
Blackmon, H. J., Tampa.....	169
Brantley, Z., Grandin.....	226
Brittingham, Smith, Norfolk, Va.....	126
Butt, Thomas, Orlando.....	323
Carlton, Leland F., Tampa.....	175
Carson, Russell B., Ft. Lauderdale.....	120
Chamberlain, E. C., Ft. Lauderdale.....	586
Chappell, J. R., Orlando.....	323
Cumming, Richard C., Lakeland.....	594
Dieterich, Frederick H., Miami.....	115
Fleming, Richard M., Miami.....	373
French, Elmo D., Miami.....	61
Gammage, F. V., Chattahoochee.....	333
Gonzalez, L. C., Jacksonville.....	286
Hanson, Karl, Jacksonville.....	381
Harkness, R. B., Lake City.....	29
Harris, Seale, Birmingham, Ala.....	15
Heinberg, C. J., Pensacola.....	222
Hoffman, James M., Pensacola.....	162
Hollender, A. R., Miami Beach.....	27
Ireland, H. J., New York.....	82



HYGEIA

The Health Magazine

Will teach your patients about diet and exercise, child welfare, and household sanitation, the value of professional service and the importance of healthful living. It is a splendid investment. Keep it on your office table. Here is a special offer—\$3.00 a year; 6 months for \$1.00.

Pin a dollar to this ad and mail to

AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn St., Chicago

*Ambulance Directory***COMBS FUNERAL HOMES****Ambulance Service**

Phone 32101 Phone 52101
MIAMI, FLORIDA MIAMI BEACH, FLA.

FERGUSON FUNERAL HOME, INC.

1201 South Olive

WEST PALM BEACH, FLA.

THE TUCKER SANATORIUM, Incorporated
212 West Franklin Street (Corner of Madison) RICHMOND, VIRGINIA



Private Sanatorium for neurological cases under the charge of Drs. Beverley R. Tucker, Howard R. Masters and James Asa Shield. Department of Physiotherapy.

convention
press

two eighteen west church street
jacksonville, florida

printers
publishers

Cook County
Graduate School of Medicine

(In affiliation with COOK COUNTY HOSPITAL)
Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two Weeks Intensive Course in Surgical Technique with practice on living tissue, every two weeks throughout the year. General Courses One, Two, Three and Six Months; Clinical Courses; Special Courses.

MEDICINE—Two Weeks Intensive Course will be offered starting October 5th. Two Weeks Course in Gastro-Enterology will be offered starting October 19th. Two Weeks Intensive Course in Electrocardiography and Heart Disease starting August 3rd.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course will be offered starting June 29th and September 21st. Informal course available every week.

GYNECOLOGY—Two Weeks Intensive Course will be offered starting October 5th. One Month Personal Course starting August 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered starting September 21st. Three Weeks Course starting August 10th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered starting September 14th. Clinical and Special Courses every week.

OPHTHALMOLOGY—Two Weeks Course will be offered starting September 28th. Five Weeks Course in Refraction Methods starting October 19th. Informal Course every week.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES.

Teaching Faculty

Attending Staff of Cook County Hospital

Address:

Registrar, 427 South Honore Street, Chicago, Ill.

*Everhart Surgical Supply Co.*493 Peachtree St. N. E.
ATLANTA, GA.

We have been serving the Medical Profession in Florida and Georgia for over a quarter-century, successfully and satisfactorily.

G. I. BUTZER, *Florida representative*
45 E. WINTER PARK AVE., ORLANDO

J. K. ATTWOOD, Pharmacist

Medical Arts Building

1022 Park Street

JACKSONVILLE, FLORIDA

BIOLOGICALS TEST SOLUTIONS

STAINS (MICROSCOPIC)

PRESCRIPTIONS

*Out-of-Town Orders Shipped by Return Mail***Disabilities occasioned by war are covered in full**

86c out of each \$1.00 gross income used
for members' benefit

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION



Hospital, Accident, Sickness

INSURANCE

For Ethical Practitioners Exclusively
(57,000 Policies in Force)

LIBERAL HOSPITAL EXPENSE COVERAGE	For \$10.00 per year
\$5,000.00 ACCIDENTAL DEATH	For \$32.00 per year
\$25.00 weekly indemnity, accident and sickness	
\$10,000.00 ACCIDENTAL DEATH	For \$64.00 per year
\$50.00 weekly indemnity, accident and sickness	
\$15,000.00 ACCIDENTAL DEATH	For \$96.00 per year
\$75.00 weekly indemnity, accident and sickness	

40 years under same management

\$2,220,000 INVESTED ASSETS
\$10,750,000 PAID FOR CLAIMS

\$200,000 deposited with State of Nebraska for protection of our members

Disability need not be incurred in line of duty—benefits from the beginning day of disability

Send for application, Doctor, to

400 First National Bank Building
OMAHA, NEBRASKA

STATE AND SECTIONAL MEETINGS

SOCIETY	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association.....	Gilbert S. Osincup, Orlando.....	Shaler Richardson, Jacksonville.....	St. Petersburg, Apr. 12-14, 1942
Florida Medical Districts:			
A—Northwest	Courtland D. Whitaker, Marianna.....	Stewart Thompson, Jacksonville.....	Tallahassee, Oct. 8, 1942
B—Northeast	L. Y. Dyrenforth, Jacksonville.....	" " ".....	Ocala, Oct. 15, 1942
C—Southwest	Edgar Watson, Lakeland	" " ".....	Sarasota, Oct. 22, 1942
D—Southeast	Lloyd J. Netto, W. Palm Beach.....	" " ".....	Miami, Oct. 29, 1942
Alabama Medical Association.....	H. B. Searcy, Tuscaloosa.....	D. L. Cannon, Montgomery.....	Birmingham, Apr. 20-22, 1943
Georgia, Medical Assn. of.....	James A. Redfearn, Albany.....	E. D. Shanks, Atlanta.....	Atlanta, May 11-14, 1943
Florida—			
Section, Am. College Phys.....	R. H. Knowlton, St. Petersburg.....	Kenneth Phillips, Miami.....	St. Petersburg, Apr. 11-12, 1942
Dental Society, State.....	I. W. Shields, Miami.....	W. P. Wood, Jr., Tampa.....	Tampa
Derm. and Syph., Soc. of.....	Wiley M. Sams, Miami.....	Lauren M. Sompayrac, Jacksonville.....	Jacksonville, July 12, 1942
East Coast Medical Association.....	T. C. Kenaston, Cocoa.....	I. M. Hay, Melbourne.....	Melbourne, 1942
Hospital Association.....	Mr. Ernest G. McKay, Tampa.....	Mr. R. L. Martin, St. Petersburg.....	Tampa, June 13, 1942
Industrial Surgeons, Assn. of.....	Frank D. Gray, Orlando.....	Richard H. Walker, Orlando.....	St. Petersburg, Apr. 11-12, 1942
Medical Postgraduate Course.....	Turner Z. Cason, Jacksonville.....	Chairman	Jacksonville, June 22-27, 1942
Nurses Association, State.....	Mrs. M. Stetson, St. Petersburg.....	Mrs. Phyllis Leonard, St. Augustine.....	Orlando, November, 1942
Ophthal. & Otol., Soc. of.....	Shaler Richardson, Jacksonville.....	C. E. Dunaway, Miami.....	St. Petersburg, Apr. 11-12, 1942
Pathological Society.....	L. Y. Dyrenforth, Jacksonville.....	Iva C. Youmans, Miami.....	St. Petersburg, Apr. 11-12, 1942
Pediatric Society.....	Warren W. Quillian, Coral Gables.....	G. N. Leonard, Miami Beach.....	St. Petersburg, Apr. 11-12, 1942
Pharmaceutical Association, State.....	Mr. Emmett L. Brown, Palatka.....	Mr. R. Q. Richards, Ft. Myers.....	Tallahassee, May 19-21, 1942
Public Health Association.....	W. H. Pickett, Jacksonville.....	Lloyd N. Harlow, Jacksonville.....	Miami, Fall, 1942
Radiological Society.....	John N. Moore, Ocala.....	Walter A. Weed, Orlando.....	St. Petersburg, Apr. 11-12, 1942
Railway Surgeons' Association.....	Frank D. Gray, Orlando.....	W. C. Page, Cocoa.....	St. Petersburg, Apr. 11-12, 1942
Tuberculosis & Health Assn.....	Mr. E. M. Newald, Orlando.....	Mrs. C. R. Whitaker, Eustis.....	Tampa, May 18-19, 1942
Chattahoochee Valley Med. Assn.....	Herbert E. White, St. Augustine.....	Robert B. McIver, Jacksonville.....	Postponed
Gulf Coast Clinical Society.....	G. G. Oswalt, Mobile, Ala.....	C. L. Rutherford, Mobile, Ala.....	Mobile, 1942
S.E. Sec., Am. Cong. Phys. Ther.....	John J. McGuire, Pensacola.....	Kenneth Phillips, Miami.....	
Southeastern Surgical Congress.....	Alton Ochsner, New Orleans.....	B. T. Beasley, Atlanta.....	Louisville, Mar. 8-10, 1943
Southern Medical Association.....	M. Pinson Neal, Columbia, Mo.....	Mr. C. P. Loran, Birmingham.....	Richmond, November, 1942
Suwannee River Medical Society.....	L. J. Arnold, Jr., Lake City.....	T. H. Bates, Lake City.....	Lake City, Dec. 1942

COMPONENT SOCIETIES BY DISTRICTS

SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	MEMBERS		COUNCILOR
				Total	Paid	
Bay	M. F. Parker, M.D. Panama City	W. C. Roberts, M.D. Panama City		10	9	A-1-43 C. D. Whitaker, M.D. Marianna
Escambia *Santa Rosa	A. L. Stebbins, M.D. State Bd. of Health Pensacola	William S. Randall, M.D. 1419 E. Cervantes St. Pensacola	2nd Tuesday 8:00 P.M.	52	51	
Franklin-Gulf	Thos. Meriwether, M.D. Wewahitchka	J. R. Norton, M.D. Port St. Joe	3rd Tuesday Odd Months	5	4	
Jackson *Calhoun	W. R. Wandeck, M.D. Marianna	R. N. Joyner, M.D. Marianna	2nd Tuesday 7:30 P.M.	11	100%	
Walton-Okaloosa	A. G. Williams, M.D. Lakewood	R. B. Spires, M.D. DeFuniak Springs	3rd Thursday 8:00 P.M.	6	100%	
A Washington-Holmes	N. J. Dawkins, M.D. Vernon	B. W. Dalton, M.D. Vernon		6	100%	A-2-44 William D. Rogers, M.D. Chattahoochee
Columbia *Baker, Hamilton	Harry S. Howell, M.D. Blanche Hotel Annex Lake City	Thomas H. Bates, M.D. Blanche Hotel Annex Lake City	1st Monday 7:30 P.M.	11	100%	
Leon-Gadsden- Liberty-Wakulla- Jefferson	G. H. Garmany, M.D. Tallahassee	B. A. Wilkinson, M.D. Telephone Bldg. Tallahassee	Quarterly 3:00 P.M.	40	36	
Madison-Suwannee	Eustace Long, M.D. Madison	E. D. Thorpe, M.D. Madison		8	100%	
Taylor *Dixie, Lafayette	J. C. Ellis, M.D. Perry	Chas. A. O'Quinn, M.D. Perry	Last Friday 8:00 P.M.	5	100%	
Alachua *Bradford, Gilchrist, Union	J. Lec Summerlin, M.D. 1 Baird Bldg. Gainesville	A. T. Cobb, M.D. 331 W. University Ave. Gainesville	2nd Wednesday 7:30 P.M.	29	20	B-3-43 L. Y. Dyrenforth, M.D. Jacksonville
Duval *Clay, Nassau	Ernest B. Milam, M.D. 508 Greenleaf Bldg. Jacksonville	Frank G. Slaughter, M.D. 2033 Riverside Ave. Jacksonville	1st Tuesday 8:15 P.M.	192	100%	
Marion *Levy	B. S. Stutts, M.D. Anderson Bldg. Dunnellon	T. Hartley Davis, M.D. 202 Commercial Bank Ocala	3rd Thursday 12:30 P.M.	29	27	
Putnam	J. Worth Brantley, M.D. Grandin	Allen P. Gurganious, M.D. Palatka	2nd Tuesday Even Months 7:00 P.M.	10	9	
St. Johns	W. D. Webb, M.D. 220 St. George St. St. Augustine	Charles C. Grace, M.D. East Coast Hospital St. Augustine	3rd Tuesday 8:30 P.M.	12	100%	
B Brevard	G. T. von Colditz, M.D. Route 1 Cocoa	I. K. Hicks, M.D. Melbourne	3rd Wednesday	11	10	B-4-44 Meredith Mallory, M.D. Orlando
Lake *Sumter	Louis R. Bowen, M.D. Box 905 Eustis	Clyde F. Bowie, M.D. 1112 W. Main St. Leesburg	1st Thursday 12:30 P.M.	20	17	
Orange *Osceola	Spencer A. Folsom, M.D. 319 Exchange Bldg. Orlando	E. E. Hitchcock, M.D. 7 E. Colonial Dr. Orlando	3rd Wednesday 8:30 P.M.	89	80	
Seminole	C. L. Park, M.D. 515 1st Nat. Bank Bldg. Sanford	O. L. Barks, M.D. Sanford Clinic Sanford	2nd Monday 7:00 P.M.	13	100%	
Volusia *Flagler	W. C. Pay, M.D. 221 W. Rich Ave. DeLand	R. L. Miller, M.D. 2581 1/2 S. Beach St. Daytona Beach	2nd Tuesday 7:30 P.M.	46	39	
Hillsborough	R. W. Lowry, M.D. 1019 Citizens Bk. Bldg. Tampa	James S. Grable, M.D. 811 Citizens Bk. Bldg. Tampa	1st Tuesday 8:00 P.M.	105	94	C-5-44 Leland F. Carlton, M.D. Tampa
Manatee	L. W. Blake, M.D. Bradenton	M. M. Harrison, M.D. Professional Bldg. Bradenton	3rd Tuesday 7:00 P.M.	14	100%	
Pasco-Hernando- Citrus	J. T. Bradshaw, M.D. San Antonio	G. R. Creekmore, M.D. Brooksville	2nd Thursday 7:00 P.M.	13	100%	
Pinellas	M. A. Nickle, M.D. 503 Coachman Bldg. Clearwater	O. O. Feaster, M.D. 166 Fourth Ave. N. E. St. Petersburg	1st and 3rd Fridays 6:30 P.M.	105	100%	
Sarasota	A. Lamar Matthews, M.D. Sarasota	Stanley T. Martin, M.D. 361 Main St. Sarasota	2nd Tuesday 8:30 P.M.	19	15	
C DeSoto-Hardee- Highlands- Charlotte-Glades	L. W. Martin, M.D. Sebring	G. H. McSwain, M.D. Arcadia	2nd Tuesday 8:00 P.M.	19	18	C-6-43 Edgar Watson, M.D. Lakeland
Lee *Collier, Hendry	Harvie J. Stipe, M.D. 312 Pythian Bldg. Fort Myers	A. Louis Girardin, M.D. 309 Pythian Bldg. Fort Myers	3rd Tuesday 7:30 P.M.	17	16	
Polk	J. R. Boulware, M.D. Box 367 Lakeland	Edgar Watson, M.D. Box 1021 Lakeland	2nd Wednesday 1:00 P.M.	61	56	
Palm Beach	James R. Sory, M.D. 616 Harvey Bldg. W. Palm Beach	D. W. Martin, M.D. 618 Comeau Bldg. W. Palm Beach	4th Monday 8:00 P.M.	68	66	D-7-43 Lloyd J. Netto, M.D. West Palm Beach
St. Lucie- Okeechobee-Indian River-Martin	R. C. Boothe, M.D. Box 408 Ft. Pierce	Adrian M. Sample, M.D. Box 176 Ft. Pierce	3rd Thursday 8:00 P.M.	18	100%	
Broward	Elbert McLaury, M.D. 210 Hollywood Bk. Bldg. Hollywood	O. C. Brown, M.D. 915 Sweet Bldg. Fort Lauderdale	4th Wednesday 8:00 P.M.	41	100%	
Dade	Thomas O. Otto, M.D. 704 Huntington Bldg. Miami	Herbert Eichert, M.D. 537 duPont Bldg. Miami	1st Tuesday 8:30 P.M.	342	280	D-8-44 Elbert McLaury, M.D. Hollywood
Monroe	Harry C. Galey, M.D. 532 Fleming St. Key West	W. R. Warren, M.D. 511 Eaton St. Key West	1st Sunday 9:00 P.M.	5	100%	

Are the Neuritic Symptoms of Pregnancy *due to a deficiency* *of vitamin B₁ (thiamine) ?*

SUCH common neuritic symptoms of pregnancy as pains in arms and legs, muscle weakness, and (less frequent but more serious) paralysis of the extremities may result from a shortage of antineuritic vitamins, recent investigations appear to show. Although neuronitis of pregnancy has long been considered a toxemia, no toxins have ever been identified.

Clinical observations of Strauss and McDonald lead to the conclusion that the condition is a dietary deficiency disorder similar to beriberi, caused by lack of vitamin B₁. They report recovery in their cases receiving this therapy, including dried brewers' yeast.

Hyperemesis as Cause of Avitaminosis

Wechsler observes that all cases of polyneuritis of pregnancy recorded in the literature were preceded by long periods of severe vomiting. "It would seem," he adds, "that because of actual starvation these patients suffered from avitaminosis and consequent neuritis," a view likewise held by Hirst, Luikart, and Gustafson. Plass and Mengert observe that the practice of giving high carbohydrate feedings for hyperemesis gravidarum is still more likely to cause avitaminosis.

Dried brewers' yeast, as it is far richer than any other food in vitamin B₁ (thiamine), is being used with benefit both in the prevention and treatment of polyneuritic symptoms of pregnancy. Lewy found that additions of yeast to the diet reduced electric irritability of the peripheral nerves and brought clinical improvement. Vorhaus states that he and his associates, after administering large amounts of vitamin B₁ (thiamine) to 250 patients having various types of neuritis, including that of pregnancy, observed in about 90% of cases "varying degrees of improvement, i.e., from partial relief of pain to complete disappearance of all symptoms."

Need for Vitamin B₁ (thiamine) in Lactation

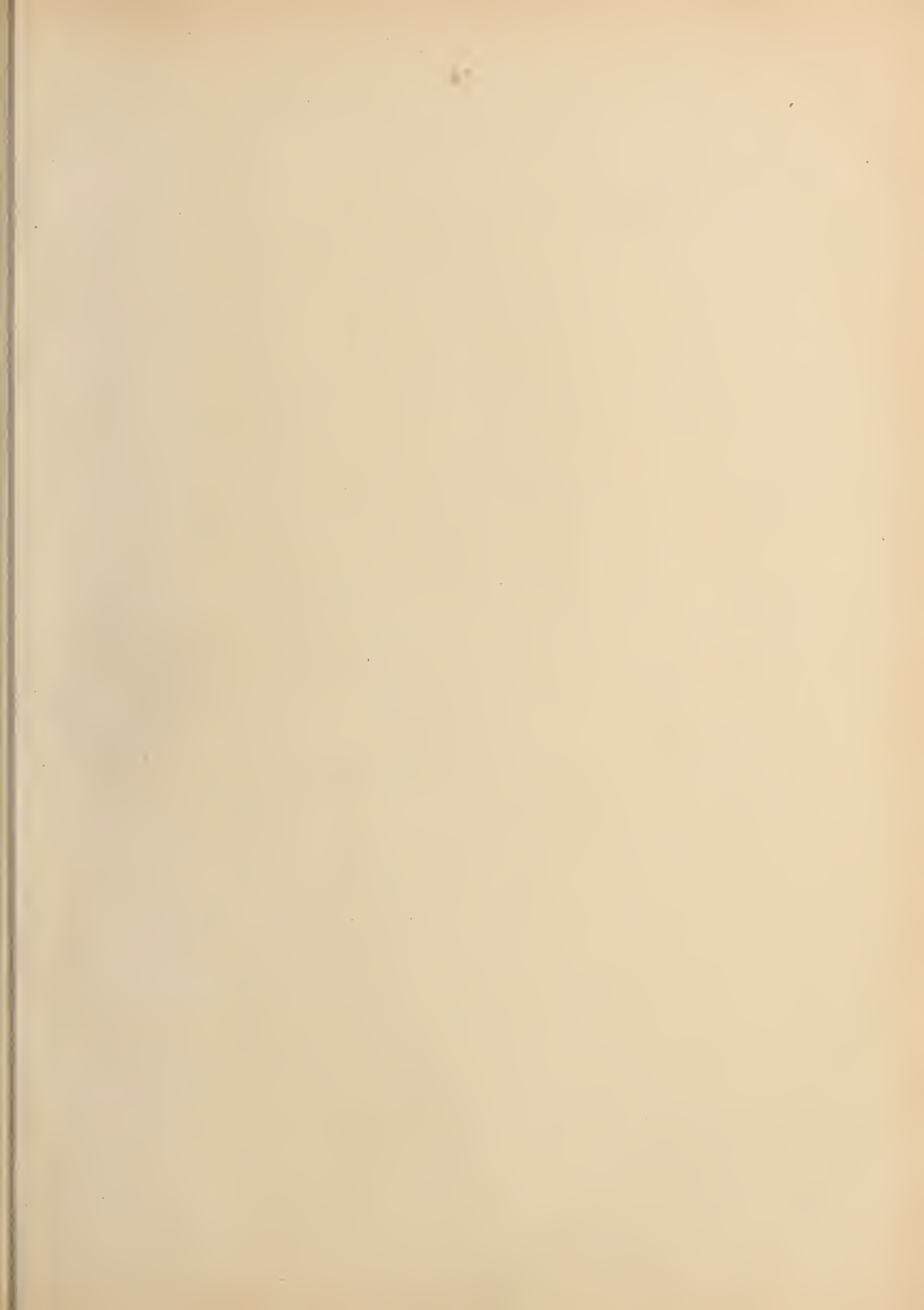
Evans and Burr, Hartwell, Sure and co-workers, and Macy *et al* are among numerous authorities who find that the nursing mother also needs a supplement of vitamin B₁ (thiamine) from 3 to 5 times the normal requirement. It is accepted that during pregnancy and lactation the requirement for vitamin G (riboflavin) is increased.

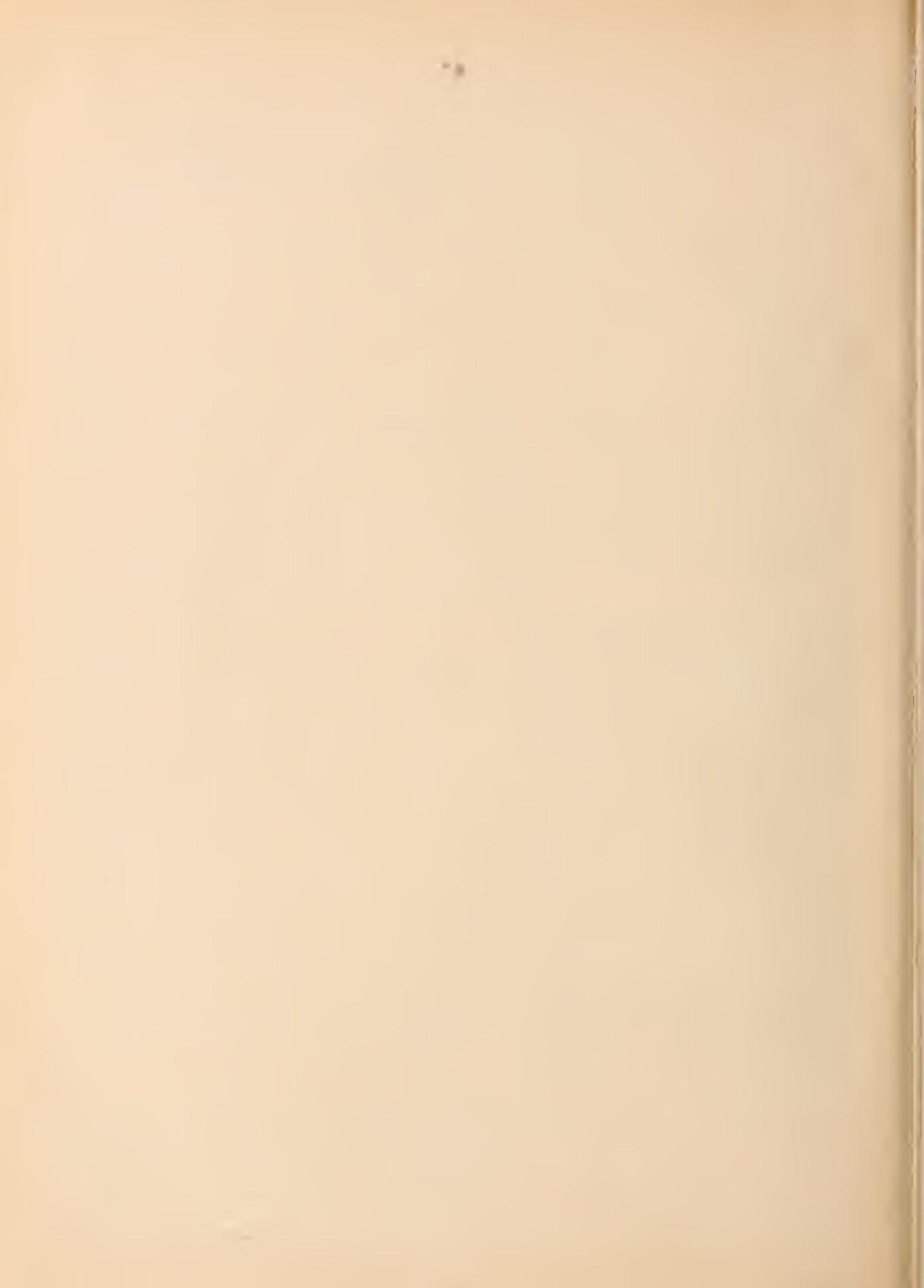


Consisting of nonviable yeast, Mead's Brewers Yeast Tablets offer not less than 50 International vitamin B₁ (thiamine) units and 50 Sherman vitamin G (riboflavin) units per gram (20 International units of vitamin B₁ and 20 Sherman units of vitamin G per tablet).

Supplied in bottles of 250 and 1,000 tablets, also in 6-oz. bottles of powder.

Please enclose professional card when requesting samples of Mead Johnson products to co-operate in preventing their reaching unauthorized persons
Mead Johnson & Company, Evansville, Indiana, U. S. A.







THIS BOOK MUST NOT BE RETAINED FOR
LONGER THAN ONE WEEK AFTER THE LAST
DATE ON THE SLIP UNLESS PERMISSION FOR ITS
RENEWAL BE OBTAINED FROM THE LIBRARY.

SEP 14 1954	SEP 14 1954	SEP 14 1954
JUL 15 1954	JUL 15 1954	JUL 15 1954
APR 5 - 1961	APR 5 - 1961	APR 5 - 1961
JUN 1954	JUN 1954	JUN 1954
TEMP	TEMP	TEMP
F.R.	F.R.	F.R.

